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ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABB76407 standard; protein; 63 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Osteopontin-derived peptide,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABB76407;
                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB76407
                                                                                                   July 27, 2005, 17:56:17; Search time 165 Seconds (without alignments) 147.672 Million cell updates/sec
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333
1 RSRRAIEVFTPVVPTVDTYD.....AGGPAGPAGPAGPAGPA
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                           2105692 seqs, 386760381 residues
                                                                    OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

geneseqp2003as:* geneseqp2003bs:*

geneseqp2004s:*

SUMMARIES

Description	Abb76407 Osteopont	Aae18619 Biosynthe	_	Abb76410 Osteopont	Abb76404 Osteopont	Abb76411 Osteopont	Abb76405 Osteopont	-	Adel2215 Human the	Adj67551 Human ova	Adj67676 Human ova	Aao30815 Human cel	Adm47287 Osteopont	Ads10984 Human the		Abp58125 Human ost	Aab30575 A human E	Abg96388 Human ova		_	Adb75483 Prostate	Adg88475 Human OPN	Adm47215 Osteopoti		Abp58124 Human ost
Ð	ABB76407	AAE18619	ABB76406	ABB76410	ABB76404	ABB76411	ABB76405	ABG79674	ADS12215	ADJ67551	ADJ67676	AA030815	ADM47287	ADS10984	AAR30701	ABP58125	AAB30575	ABG96388	ABR47551	ABR92133	ADB75483	ADQ88475	ADM47215	AAR30700	ABP58124
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Length DB	63	87	40	40	40	40	49	192	218	243	243	273	278	279	282	286	287	287	287	287	287	287	290	296	299
% Query Match	100.0	70.9	62.2	60.4	60.1	60.1	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4
Score	333	236	207	201	200	200	181	181	181	181	181	181	181	181	181	181	181	181	181	181	181	181	181	181	181
Result No.	7	7	e	4	S	9	7	80	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Aay05402 Human ost Aab19769 Human ost Aab30674 A human B Abg96387 Human ova Abg96482 Metastati Aau76901 Human ost Abp65152 Hypoxia-r Abp96798 Human COP Abb167798 Lung canc Abr47560 Breast canc Abr92132 Human Cer Adb77481 Prostate Adf90872 Human hep Adf90873 Human nec Adf90878 Human sec Adf90878 Concer/an Adf90878 Human sec	
AAY05402 AAB19769 AAB19769 AAB056387 AAU76901 ABP5152 AAB75602 ABP65128 ABP65128 ABP65128 ABP7550 ABR92132 ADP70872 ADP70873 ADP70873 ADP70228 ADP70228 ADP70228	
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The present sequence is an osteopontin-derived peptide, which regulates cell development and binds to an integrin on a cell surface. The invention provides an osteopontin containing implant which increases the rate of osseointegration and the percentage of bone apposition. The implant includes osteopontin, an active fragment of osteopontin or an osteopontin derived peptide such as the present claimed peptide. Claimed osteopontin derived peptides of the invention (see ABB7643-11) bind to various cell types and play important roles in cellular differentiation and/or motility. These cells include osteoprogenitor cells, tumour cells, macrophages, periosteal cells, endothelial cells, epithelial cells, eosinophils, stem cells, imited potential precursor cells, precursor cells, committed precursor cells, and differentiated cells. The peptides are also active as antiinflammatory agents. Antibodies provide a Osteopontin derived peptides useful in implants e.g. dental screws or fixtures, and orthopedic joints. Osteopontin; osteopathic; bone; tissue formation; antiinflammatory; cell differentiation. (CHIL-) CHILDRENS MEDICAL CENT. Claim 1; Page 8; 64pp; English. 18-OCT-2001; 2001WO-US032457. 18-OCT-2000; 2000US-0241248P. 05-OCT-2001; 2001US-0327273P. Askar S, Salcedo J; WPI; 2002-479661/51. WO200232940-A2. Homo sapiens. 25-APR-2002.

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mechanism to abolish or attenuate the activities of the claimed peptides. The implant can be used in an osteopontin containing cell recruitment system, to induce new tissue formation in a subject, and to promote cell differentiation (all claimed). The implants include surgical implants ench as dental screws or fixtures, jaw modification implants, face reconstitution implants, orthopaedic implants e.g. orthopaedic screws, rods or joints such as hip or knee replacement implants
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                                                                                                                                                                                                                                                                                                                                                                                                       1 RSRRATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRPAGAAGGPAGPAGPAGPA
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                                                                                                                                                                                                                                                                                         Length 63
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:e= "Golgi processing region"
                                                                                                                                                                                                                                                                                      100.0%; Score 333; DB 5; 100.0%; Pred. No. 6.1e-30;
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/label= Heparin_binding_domain
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/label= Apoptic_domain
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/label= Signal_peptide
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                                                                                                                                                                                                                                                                                                                                              63; Conservative
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                                                                                                                                                                                                                                 Sequence 63 AA;
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                                                                     functional domains derived from osteopontin. These molecules are capable of promoting cellular apoptosis. Biosynthetic oncolytic molecules are useful for modulating an apoptotic response in a cell. These molecules are useful for treating cancer, inflammatory conditions such as arthritis, for elimination of abnormal or unwanted cells that express at least an integrin receptor and/or that co-express both an integrin and a CD44 receptor and for regulating cell growth processes. DNA encoding this molecule is useful in gene therapy. The present sequence is a biosynthetic oncolytic molecule, oncolysin 2
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                                                       The invention relates to biosynthetic oncolytic molecules which include
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Pred. No. 7e-19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            fixtures, and orthopedic joints.
                 Claim 30; Fig 2A; 48pp; English.
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86.8%;
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Best Local Similarity
                                                                                                                                                                                                                                                                  Sequence 87 AA;
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rods or joints such as hip or knee replacement implants

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The present sequence is an osteopontin-derived peptide, which regulates cell development and binds to an integrin on a cell surface. The invention provides an osteopontin contraining implant which increases the rate of osseointegration and the percentage of bone apposition. The implant includes osteopontin, an active fragment of osteopontin or an osteopontin derived peptide such as the present claimed peptide. Claimed osteopontin derived peptides of the invention (see ABB76403-11) bind to osteopontin derived peptides of the invention (see ABB76403-11) bind to various cell types and play important roles in cellular differentiation and/or motility. These cells include osteoprogenitor cells, tumour cells, and/or motility. These cells include osteoprogenitor cells, precursor cells, precursor cells, committed precursor cells, and differentiated cells. The peptides osteopopils, stem cells, limited potential precursor cells, precursor cells, committed precursor cells, and differentiated peptides. The implant can be used in an osteopontin containing cell recruitment in system, to induce new tissue formation in a subject, and to promote cell differentiation (all claimed). The implants include surgical implants centends as dental screws or fixtures, jaw modification implants, face reconstitution implants, orthopaedic implants e.g. orthopaedic screws,
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  mechanism to abolish or attenuate the activities of the claimed peptides.
                 The implant can be used in an osteopontin containing cell recruitment system, to induce new tissue formation in a subject, and to promote cell differentiation (all claimed). The implants include surgical implants such as dental screws or fixtures, jaw modification implants, face reconstitution implants, orthopaedic implants e.g. orthopaedic screws, rods or joints such as hip or knee replacement implants
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100.0%; Pred. No. 5.6e-16;
ive 0; Mismatches 0;
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05-OCT-2001; 2001US-0327273P
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Matches 40; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABB76410;
                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Askar S,
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The present sequence is osteopontin-derived peptide OC-1016, which regulates cell development and binds to an integrin on a cell surface. The invention provides an osteopontin containing implant which increases the rate of osseointegration and the percentage of bone apposition. The implant includes osteopontin, an active fragment of osteopontin or an osteopontin-derived peptides with a present, preferred peptide. Claimed osteopontin derived peptides of the invention (see ABB76403-11) to induce various cells types and play important roles in cellular cells, compliants of metility. These cells include osteoprogenitor cells, tumour cells, macrophages, periosteal cells, endothelial cells, cepithelial cells, committed precursor cells, macrophages, periosteal cells, and differentiated cells, cells, precursor cells, committed precursor cells, macrophages, periosteal cells, and differentiated cells, cells, precursor cells, precursor cells, macrophages, periosteal cells, and differentiated cells, committed precursor cells, and differentiated cells, committed precursor cells, macrophages, containing cell recruitment system, to induce new tissue formation in a cubject, and to promote cell differentiation (all claimed). The implants completed in maplants, face reconstitution implants, completed in maplants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       orthopaedic screws, rods or joints such as hip or knee replacement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Osteopontin derived peptides useful in implants e.g. dental screws or fixtures, and orthopedic joints.
                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                            Osteopontin; osteopathic; bone; tissue formation; antiinflammatory; cell differentiation.
                                                                                                             ..
                                                                         Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60.1%; Score 200; DB 5; Length 40;
                                                                                                             1; Indels
                                                                                                                                                40
                                                                                                                                                                   1 RSRRATEVFTPVVPTVDTYDGRADSVVYGRRSKSKKFRRP 40
                                                                                                                                                1 RSRRATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP
                                                                       Score 201; DB 5;
Pred. No. 2.6e-15;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                       Osteopontin-derived peptide OC-1016.
                                                                                                                                                                                                                                                                             ABB76404 standard; protein; 40 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 59; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CHIL-) CHILDRENS MEDICAL CENT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-OCT-2000; 2000US-0241248P. 05-OCT-2001; 2001US-0327273P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-OCT-2001; 2001WO-US032457.
                                                                         ch 60.4%;
1 Similarity 97.5%;
39; Conservative
                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Salcedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-479661/51.
                                                                                          Local Similarity
                                    Sequence 40 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 40 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
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                                                                                                                                                                                                                                                                                                                  ABB76404;
                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Askar S,
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                                                                                                           Matches
                                                                                                                                                                                                                                           RESULT 5
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us-09-981-845-11.rag

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Gaps

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Indels

Mismatches

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Conservative

39;

Matches

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The present sequence is osteopontin-derived peptide mCC-1016, which regulates cell development and binds to an integrin on a cell surface.

The invention provides an osteopontin containing implant which increases the rate of osseointegration and the percentage of bone apposition. The implant includes osteopontin, an active fragment of osteopontin or an osteopontin derived peptide such as the present, preferred peptide.

Claimed osteopontin derived peptides of the invention (see ABB76403-11) bind to various cell types and play important roles in cellular differentiation and/or motility. These cells include osteoprogenitor cells, tumour cells, macrophages, periosteal cells, endothelial cells, cesinophills, stem cells, indiced potential precursor cells, precursor cells, committed precursor cells, and differentiated cells. The peptides are also active as antiniflammatory agents.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     include surgical implants such as dental screws or fixtures, jaw modification implants, face reconstitution implants, orthopaedic implants e.g. orthopaedic screws, rods or joints such as hip or knee replacement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the claimed peptides. The implant can be used in an ostcopontin containing cell recruitment system, to induce new tissue formation in a subject, and to promote cell differentiation (all claimed). The implants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Osteopontin derived peptides useful in implants e.g. dental screws or
                     Gaps
                                                                                                                                                                                                                                                                                                    Osteopontin; osteopathic; bone; tissue formation; antiinflammatory; cell differentiation.
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0
                 Indels
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                                                                                    40
                                                                      1 RSRRATEVFTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP
                                                  1 RSRRATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP
 Pred. No. 3.4e-15;
                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "N-terminal acetyl"
                                                                                                                                                                                                                                                                        Osteopontin-derived peptide mOC-1016.
                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                    ABB76411 standard; protein; 40 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                fixtures, and orthopedic joints.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 59; 64pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CHIL-) CHILDRENS MEDICAL CENT,
97.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-2000; 2000US-0241248P.
                                                                                                                                                                                                                                     (first entry)
                   39; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Salcedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-479661/51.
 Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                            Key
Modified-site
                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                       27-AUG-2002
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                                                                                                                                                                                                     ABB76411;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mplants
                   Matches
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Score 200; DB 5; Length 40; Pred. No. 3.4e-15;

60.1%; 97.5%;

Sequence 40 AA; Query Match Best Local Similarity

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The present sequence is an osteopontin-derived peptide, which regulates cell development and binds to an integrin on a cell surface. The invention provides an osteopontin contraining implant which increases the rate of osseointegration and the percentage of bone apposition. The implant includes osteopontin, an active fragment of osteopontin or an osteopontin derived peptide such as the present claimed peptide. Claimed osteopontin derived peptides of the invention (see ABB76403-11) bind to various cell types and play important roles in cellular differentiation and/or motility. These cells, include osteoprogenitor cells, tumour cells, macrophages, periosteal cells, endothelial cells, epithelial cells, essinophils, stem cells, limited potential precursor cells, precursor cells, and differentiated cells, precursor cells, and differentiated cells, precursor cells, and differentiated cells, previde a mechanism to abolish or attenuate the activities of the claimed peptides. The implant can be used in an osteopontin containing cell recruitment system, to induce new tissue formation in a subject, and to promote cell cuch as dental screws or fixtures, jaw modification implants face reconstitution implants, orthopaedic implants e.g. orthopaedic screws, code or joints such as the propertice of implants e.g. orthopaedic screws,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Osteopontin derived peptides useful in implants e.g. dental screws or fixtures, and orthopedic joints.
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                                                                                                                                                                                                                                                                   Osteopontin; osteopathic; bone; tissue formation; antiinflammatory; cell differentiation.
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40
                                 40
                          RSRRATEVFTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP
1 RSRRATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 181; DB 5;
Pred. No. 5.8e-13;
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0
                                                                                                                           ABB76405 standard; protein; 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 8; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CHIL-) CHILDRENS MEDICAL CENT
                                                                                                                                                                                                                                                                                                                                                                                                                                  18-OCT-2001; 2001WO-US032457.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-OCT-2000; 2000US-0241248P. 05-OCT-2001; 2001US-0327273P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         54.4%;
                                                                                                                                                                                                                                     Osteopontin-derived peptide
                                                                                                                                                                                                  (first entry)
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Best Local Similarity 97.2
Matches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Salcedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-479661/51.
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                                                                                                                                                                                                                                                                                                                                                             WO200232940-A2
                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                  27-AUG-2002
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                                                                                         RESULT 7
ABB76405
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The invention discloses isolated human nucleic acid alternative splicing variants that are all tumour-involved genes (TIGS). The nucleic acids and polypeptides are useful for determining the level of a nucleic acid or polypeptide in a biological sample, for determining the level of polypeptide sequence in a biological sample, for determining the level of variant nucleic acid or polypeptide sequences in a biological sample and for polypeptide sequences in a biological sample and the level of variant sequence in a first biological sample and the level of the original sequence from which the variant has been varied by alternative splicing in a second to biological sample and for raising antibodies. A pharmaceutical composition comprising a carrier and the nucleic acid, is useful for treating diseases (e.g. cancer) that can be ameliorated or cured by increasing or decreasing the level of the encoded protein. The nucleic acids are also useful for disagnostic purposes, especially for detecting cancer or a predisposition to cancer, for evaluating the state or aggressiveness of cancer disease, in basic research, for understanding cancer or a predisposition to cancer, for evaluating the state or the physicological function of the original Thiological Thiologica
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the physicological function of the circulariant its, in cargeting of developing pharmaceuticals, for distinguishing various stages in the life cycle of the same type of cells which may be helpful for the development of pharmaceuticals for various cancer stages in which cell cycle is nonnormal, for determining mutations in time involved genes and in gene therapy. The polypeptides are useful for identifying compounds capable of binding to the variant product and modulating its activity and for modulating endothelial differentiation and prolliferation, as well as to modulate apoptosis either ex vivo or in vivo. The sequences presented in ABG796700-ABG79705 are the new variants (NV) 1-36 proteins of the TIGs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel nucleic acid sequence, which is an alternative splicing variant of tumor involved genes, useful for detecting cancer, predisposition to cancer, for evaluating cancer state and in gene therapy for treating
                                                                                                                                                                                                                                                                      Human; splice variant; tumour-involved gene; TIG;
pharmaceutical composition; cancer; diagnostic; tumour; gene therapy;
endothelial cell; cell differentiation; cell proliferation; apoptosis;
                                                                                                                                                                                                                  Tumour involved gene (TIG) splice variant protein, NV-5.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; Page 70-71; 180pp; English.
                                                 ABG79674 standard; protein; 192 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Котапо С,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-MAR-2001; 2001US-00805020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-MAR-2000; 2000IL-00135402.
16-MAY-2000; 2000IL-00136154.
                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Levine Z, David A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BERNSTEIN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-635679/68
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DAVID A. ROMANO C.
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                                                                                                                                                                                                                                                                                                                                                              gene therapy
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                                                                                                                                                             15-NOV-2002
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                                                                                                         ABG79674;
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(ROMA/)
RESULT 8
                             ABG7967
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The invention relates to a novel isolated polynucleotide and the encoded polypeptide. The molecules of the invention demonstrate antinflammatory, neuroportective, antianaemic, cyrostatic and vulnerary activities and may be useful in preparing a composition for diagnosing or treating inflammatory, haematopoietic, immune, neurodegenerative or stem cell disorders, such as aplastic anaemia or cancer, as well as for promoting wound healing. The molecules may also be utilised during gene therapy procedures. The current sequence is that of a human therapeutic contig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Asundi V, Ren F, Zhang J, Wehrman T, Wang Z, Ma Y;
Chen R, Zhao QA, Wang J, Ghosh M, Xue AJ, Weng G, Zhou P;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New polynucleotide, useful in preparing a composition for diagnosing or treating inflammatory, neurodegenerative or stem cell disorders, e.g., aplastic anemia or cancer for promoting wound healing.
                                                                                                                                                                                                                                                                                                                 antiinflammatory; neuroprotective; antianaemic; cytostatic; vulnerary; inflammatory; haematopoiesis; immunity; neurodegenerative; stem cell; aplastic anaemia; cancer; wound healing; gene therapy.
                                  Gaps
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   Length 192
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                                                                                                                                                                                                                                                                                                                                                                                                                                    1. 218
/label= Unknown, OTHER
/note= "OTHER = In-frame STOP codon"
                                                                                     142 ATEVFTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  169 ATEVFTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP 204
                                                                  5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP 40
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54.4%; Score 181; DB 5; 97.2%; Pred. No. 2.5e-12; ive 0; Mismatches 1
                                                                                                                                                                                                                                                                                    Human therapeutic contig protein - SEQ ID 2452.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; SEQ ID NO 2452; 718pp; English.
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                                                                                                                                                                                   ADS12215 standard; protein; 218
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-OCT-2002; 2002US-0416186P.
                                                                                                                                                                                                                                                   16-DEC-2004 (first entry)
Query Match
Best Local Similarity 97.2
Matches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (NUVE-) NUVELO INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                    Misc-difference 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2004080148-A2
                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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Wang D, (
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Matches
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Sequence 192 AA;

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2002US-0351352P.
2002US-0357168P.
2002US-0369128P.
2002US-0370802P.
                                                         06-AUG-2003; 2003WO-US024669.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-DEC-2001; 2001US-0340278P.
                                                                                     06-AUG-2002; 2002US-0401469P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CADECM; cancer; gene therapy
                                                                                                                                             Liu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (INCY-) INCYTE GENOMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                           Salceda S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cell adhesion
                                                                                                                (DIAD-) DIADEXUS INC
                                                                                                                                                                         WPI; 2004-169331/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
tes 35; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 243 AA;
WO2004013311-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003047526-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-JAN-2002;
14-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-NOV-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-JUN-2003
                           12-FEB-2004
                                                                                                                                             Macina RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AA030815;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to novel isolated ovarian specific nucleic acid molecules and the polypeptides encoded by them. A protein of the invention has cyrostatic and immunostimulant activity. A nucleic acid of the invention may have a use as a vaccine, and in gene therapy. The nucleic acid molecule or polypeptide, antibody or kit is useful in identifying, diagnosing, monitoring, staging, imaging and treating ovarian cancer and non cancerous disease states in ovarian tissue and inducing an immune response against the ovarian cancer cell. The sequences shown in AD67535-AD467682 represent ovarian specific polypeptides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                               New ovarian specific nucleic acid, useful in identifying, diagnosing, monitoring, staging, imaging and treating ovarian cancer and non-cancerous disease states in ovarian tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human; ovarian; cytostatic; immunostimulant; vaccine; gene therapy; ovarian cancer; immune response; cancer.
                                                                                                                                                         human, ovarian; cytostatic; immunostimulant; vaccine; gene therapy; ovarian cancer; immune response; cancer.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 243;
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                                                                                                                                                                                                                                                                                                                                                                           Turner LR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71 ATEVFTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP 106
                                                                                                                               Human ovarian specific polypeptide SEQ ID NO:265.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human ovarian specific polypeptide SEQ ID NO:390.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 181; DB 8;
Pred. No. 3.2e-12;
0; Mismatches 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 12; SEQ ID NO 265; 586pp; English.
                                                                                                                                                                                                                                                                                                                                                                           Sun Y,
                                        ADJ67551 standard; protein; 243 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADJ67676 standard; protein; 243 AA
                                                                                                                                                                                                                                                                                                                                                                           Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54.4%;
                                                                                                                                                                                                                                                                                                                   06-AUG-2002; 2002US-0401469P
                                                                                                   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 97.2
hes 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                           Salceda S,
                                                                                                                                                                                                                                                                                                                                              (DIAD-) DIADEXUS INC
                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-169331/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 243 AA;
                                                                                                                                                                                                                                 WO2004013311-A2
                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-MAY-2004
                                                                                                 06-MAY-2004
                                                                                                                                                                                                                                                            12-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                            Macina RA,
                                                                      ADJ67551;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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The invention relates to novel isolated ovarian specific nucleic acid molecules and the polypeptides encoded by them. A protein of the invention has cyrostatic and immunostimulant activity. A nucleic acid of the invention may have a use as a vaccine, and in gene therapy. The nucleic acid molecule or polypeptide, antibody or kit is useful in identifying, diagnosing, monitoring, staging, imaging and treating ovarian cancer and non cancerous disease states in ovarian tissue and inducing an immune response against the ovarian cancer cell. The sequences shown in AD567535-ADJ67682 represent ovarian specific polypeptides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and extracellular matrix protein; immune disorder;
                                                                                                                                  New ovarian specific nucleic acid, useful in identifying, diagnosing, monitoring, staging, imaging and treating ovarian cancer and non-cancerous disease states in ovarian tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human cell adhesion and extracellular matrix protein (CADECM)-5.
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0
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   Turner LR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71 ATEVFTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 181; DB 8;
Pred. No. 3.2e-12;
0; Mismatches 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP
                                                                                                                                                                                                                                                                         Claim 12; SEQ ID NO 390; 586pp; English
   Υ,
       Sun
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Baughn MR, Becha SD, Bhatia U, Blake JJ, Borowsky ML, Burrill JD, Delegeane AM, Elliott VS, Gandhi AR, Gietzen KJ, Gorvad AE, Griffin JA, Ho A, Jin P, Kable AE, Lal PG, Lee EA, Lee SY, Marquis JP, Lehr-Mason PM, Ramkumar J, Richardson TW, Sprague WW; Swarnakar A, Tang TY, Tran B, Tran UK, Chawla NK, Warren BA, Xu Y;
                                                                                                                                                New human cell adhesion and extracellular matrix proteins (CADECM) polypeptide, useful for preparing a composition for treating a disease associated with decreased expression or overexpression of CADECM e.g.,
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NOVX; cytostatic; gene therapy; vaccine; cancer; chromosome mapping.
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101 ATEVPTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADM47287 standard; protein; 278 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Osteopontin like NOVX 11b protein.
                                                                                                                                                                                                                        Claim 1; Page 277; 374pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001US-0305011P
2001US-030562P
2001US-0305673P
2001US-0305085P
2001US-0308238P
2001US-0308228P
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                                                                                                      WPI; 2003-513695/48
                                                                           Yue H, Zheng W;
                                                                                                                                                                                                                                                                                                                                                                            Sequence 273 AA;
                                                                                                                   N-PSDB; AAL62017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2003083039-A2
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13-JUL-2001;
16-JUL-2001;
17-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-JUL-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unidentified
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                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Si
Matches 35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADM47287;
                                                                                                                                                                                              cancer.
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14-AUG-2001; 2001US-0312203P. 17-SEP-2001; 2001US-0322640P. 19-SEP-2001; 2001US-0323484P.

24-JUL-2001; 27-JUL-2001; 30-JUL-2001;

2001US-0323948P 2001US-0324711P 2001US-0327893P 2001US-0323821P

25-SEP-2001; 09-OCT-2001;

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The invention relates to a novel isolated polypeptide, designated NOVX.

The novel polypeptide comprises a sequence comprising 109-1671 amino caidd or its mature form; a sequence that is at least 95% identical to the 109-1671 amino acid polypeptide, or a sequence comprising one or more conservative substitutions in the 109-1671 amino acid polypeptide. The invention further comprises a composition; a kit comprising the composition; a method for determining the presence or amount of the polypeptide or nucleic acid molecule in a sample; determining the presence of, or predisposition to, a disease associated with the altered composition; a method for determining the polypeptide; identification of an agent that binds to the polypeptide; identification of a potential therapeutic agent for treating a pathology related to aberrant expression or physicological interactions of the polypeptide; adentification to, a pathology associated with the polypeptide; a method for screening for a modulator of activity or treating a pathology associated with the polypeptide; a method for modulating the activity of the polypeptide; captude; a wector comprising the nucleic acid molecule; a vector comprising the nucleic acid molecule; a cell comprising the vector; an antibody that immunospecifically binds to the polypeptide and its encoding nucleic acid mawamal; an isolated nucleic acid activity. The NOVX polymelectide can be used to create a vaccine. The polypeptide is cuseful for preparing a composition for treating or preventing a mammal, each control or mammal. For preparing a composition for treating or preventing a composition for treating or preventing a mammal.

Coult for preparing a composition for treating or preventing a composition for treating or preventing a mammal. For preparing a mammal.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Li L, Shenoy SG, Patturajan M, Ellerman K, Gorman L, Zhong M; Catterton E, Spytek KA, Miller CE, Edinger SR, Hjalt T, Gerlach VL; Shinkets RA, Taungier RJ, Anderson DW, Guo X, Baumgarrner JC; Padigaru M, Peyman JA, Smithson G, Casman SJ; Voss EZ, Boldog FL; Pena CEA, Chapoval A, Rastelli L, Kekuda R, Vernet CAM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New NOVX polypeptide, useful for preparing a composition for treating or preventing e.g. cancer or for chromosome mapping.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gape
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Pred. No. 3.7e-12;
0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 2; SEQ ID NO 120; 433pp; English.
              11-FEB-2002; 2002US-0359191P.
22-FEB-2002; 2002US-0359191P.
28-FEB-2002; 2002US-0359191P.
01-MAR-2002; 2002US-0360930P.
01-MAR-2002; 2002US-0361178P.
01-MAR-2002; 2002US-0361178P.
12-MAR-2002; 2002US-0363429P.
12-MAR-2002; 2002US-0363683P.
15-APR-2002; 2002US-037314P.
16-APR-2002; 2002US-0373063P.
11-APR-2002; 2002US-0373063P.
11-APR-2002; 2002US-0373280P.
11-APR-2002; 2002US-0373881P.
                                                                                                                                                                                                                                                                                                                                                                   02-JUL-2002; 2002US-00187975.
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1es 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-812538/76.
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110 ATEVFTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP 145
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a novel isolated polynucleotide and the encoded polypeptide. The molecules of the invention demonstrate antiniflammatory, neuroprotective, antianaemic, cytostatic and vulnerary activities and may be useful in preparing a composition for diagnosing or treating inflammatory, haematopoietic, immune, neurodegenerative or stem cell disorders, such as aplastic anaemia or cancer, as well as for promoting wound healing. The molecules may also be utilised during gene therapy procedures. The current sequence is that of a human therapeutic protein of the invention. The current sequence is not shown explicitly within the specification but can be accessed from the WIPO web-site.
                                                                                                                                                                                                                                                                                                                                            Z, Ma Y;
Weng G, Zhou P;
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                                                                                                                                                                                                                                                                                                                                                                                                                    New polynucleotide, useful in preparing a composition for diagnosing or treating inflammatory, neurodegenerative or stem cell disorders, e.g., aplastic anemia or cancer for promoting wound healing.
                                                                                                                             antiinflammatory; neuroprotective; antianaemic; cytostatic; vulnerary; inflammatory; haematopoiesis; immunity; neurodegenerative; stem cell; aplastic anaemia; cancer; wound healing; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 54.4%; Score 181; DB 8; Length 279; Best Local Similarity 97.2%; Pred. No. 3.7e-12; Matches 35; Conservative 0; Mismatches 1; Indels
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Xue AJ, V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; HUP; osteopontin; kidney stone; osteoporosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP 40
                                                                                                                                                                                                                                                                                                                                           Zhang J, Wehrman
Wang J, Ghosh M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 20; SEQ ID NO 1221; 718pp; English.
                                                                                                      Human therapeutic protein - SEQ ID 1221.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Isoform of human osteopontin protein.
                        ADS10984 standard; protein; 279 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR30701 standard; protein; 282
                                                                                                                                                                                                                                                              30-SEP-2003; 2003WO-US030720
                                                                                                                                                                                                                                                                                        02-OCT-2002; 2002US-0416186P
                                                                                                                                                                                                                                                                                                                                           Asundi V, Ren F,
Chen R, Zhao QA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-668857/65.
N-PSDB; ADS10300.
                                                                                                                                                                                                                                                                                                                 (NUVE-) NUVELO INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 279 AA;
                                                                                                                                                                                                           WO2004080148-A2
                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-MAR-2003
14-MAY-1993
                                                                            16-DEC-2004
                                                                                                                                                                                                                                     23-SEP-2004
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D,
                                                   ADS10984;
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RESULT 14
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To protein is an isoform of human osteopontin (see Young, et al., Genomics, Vol. 7, pp. 491-502, 1990). The last 4 amino acids of the HUP sequences are deleted from the isoform encoded by mRNA from human bone, decidua and kidney. The sequence may be used to design probes and primers for the isolation of HUP DNA. See also AAR30700. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                      contains
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Compsn. for treating kidney stone diseases, osteoporosis, etc. - co
aspartic acid-rich protein, and proteins having homology of active
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Pred. No. 3.7e-12;
0; Mismatches 1;
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(UYPE-) UNIV PENNSYLVANIA.
(UYCA-) UNIV CAMBRIDGE.
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97.2%;
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Best Local Similarity
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Homo sapiens.
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                                          WO9222316-A1
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Sequence 5962, Ap
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Sequence 6, Appliant No. 5340934
Sequence 17, Appliant No. 5340934
Sequence 18, Appliant No. 5340934
Sequence 21, Appliant No. 5340934
Sequence 21, Appliant No. 5340934
                                                                        July 27, 2005, 18:06:23 ; Search time 42 Seconds (without alignments) 111.974 Million cell updates/sec
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/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
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/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
               Compugen Ltd.
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US-07-712-476A-1
US-09-949-016-5962
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US-09-570-573-18
US-09-570-573-18
US-09-331-347C-21
US-08-931-820-2
US-08-951-820-2
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compug
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US-09-134-253-6
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Maximum Match 100%
Listing first 45 summaries
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Fatent No. 5304496
GENERAL INFORMATION:
JAPLICANT: Hoyer et al.
TITLE OF INVENTION: Biological Regulation of
TITLE OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz &
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz &
STREET: One Liberty Place 46th Floor
CITY: Philadelphia
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COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
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US-09-585-887-9
US-09-289-578-9
US-09-349-016-8209
US-08-316-650-14
US-08-0-902-540-12731
US-08-468-996-10
US-08-931-825-20
US-08-931-825-20
US-09-101-999-1
US-08-56-811-20
US-09-548-608-20
US-09-548-608-20
US-09-116-650-12
US-08-316-650-12
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COMPUTER: IBM PS/2
OPERATING SYSTEM: PC DOS
SOFTWARE: WORDPERFECT 5.0
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/07/712,476A
FILING DATE: 19910610
CLASSIFICATION DATA:
APPLICATION NUMBER: 32,279
FILING DATE: ATTORNEY, 32,279
REGISTRATION NUMBER: 32,279
REGISTRATION NUMBER: UPN 0473
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 282 amino acids
TOPOLOGY: linear
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Matches 35; Conservative
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; ORGANISM: Homo sapiens
US-09-206-576-2
                   ; LENGTH: 300
; TYPE: PRT
; ORGANISM: Human
US-09-949-016-5962
SEQ ID NO 5962
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Sequence 5962, Application US/09949016

Patent No. 6812339

GENERAL INFORMATION: Oraig et al.

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

CURRENT FILING DATE: 2000-04-14

PRIOR FILING DATE: 2000-10-20

PRIOR FILING DATE: 2000-10-03

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTWARE: FASELEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                         STATE: PA
COUNTRY: USA
ZIP: 19103
COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
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                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz
ADDRESSEE: No. 5304496ris
STREET: One Liberty Place 46th Floor
CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP 40
                                                                                   Sequence 1, Application US/07712476A
Patent No. 5304496
GENERAL INFORMATION:
APPLICANT: HOYER et al.
TITLE OF INVENTION: Biological Regulation of TITLE OF INVENTION: Mineralization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM P6/2
OPERATING SYSTEM: PC DOS
SOFTWARE: WORDPERFECT 5.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/712,476A
FILING DATE: 19910610
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32,279
UPN 0473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Suzanne E. Miller
REGISTRATION NUMBER: 32,279
REFERENCE/DOCKET NUMBER: UPN
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 568 3100
TELEPKX: (215) 568 3439
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 296 amino acids TYPE: AMINO ACID
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US-09-949-016-5962
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                                                                  US-07-712-476A-1
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; Sequence 2, Application US/09206576
; Patent No. 6551990
; GENERAL INFORMATION:
; APPLICANT: Giachelli, Cecilia M.
APPLICANT: Steitz, Susie
; TILE OF INVENTION: Methods of Inhibiting Ectopic Calcification
; TILE OF INVENTION: Methods of Inhibiting Ectopic Calcification
; FILE REFERENCE: P-UW 3244
; CURRENT APPLICATION NUMBER: US/09/206,576
; CURRENT FILING DATE: 1998-12-07
; NUMBER OF SEQ ID NOS: 10
; SEQ ID NOS: 10
; SEQ ID NOS: 10
; SEQ ID NOS: 13
; LENGTH: 314
; TYPE: PRT
                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/09134253
Patent No. 6509026
GENERAL INFORMATION
GENERAL INFORMATION:
TITLE OF INVENTION: Osteopontin Coated Surfaces and Methods of Use
FILE REPERENCE: cme-100cp
FILE REPERENCE: cme-100cp
CURRENT FILING DATE: 1998-08-14
EARLIER PILING DATE: 1997-08-15
FARIER FILING DATE: 1997-08-15
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Pred. No. 7.3e-13;
0; Mismatches 1; Indels
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Pred. No. 7.3e-13;
0; Mismatches 1; Indels
Query Match 54.4%; Score 181; DB 4; Length 300; Best Local Similarity 97.2%; Pred. No. 7e-13; Matches 35; Conservative 0; Mismatches 1; Indels
                                                                                                                                                   128 ATEVFTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP 163
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                                                                                                                     S ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP
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Best Local Similarity 97.2%;
Matches 35; Conservative
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Best Local Similarity 97.2
Matches 35, Conservative
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Gaps

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TITLE OF INVENTION: CDNA SEQUENCES OF HUMAN BONE MATRIX PROTEINS NUMBER OF SEQUENCES: 13
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/432,044
FILING DATE: 03-NOV-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: TERMINE, JOHN D.;YOUNG, MARIAN F.;FISHER, LARRY W.
ROBEY, PAMELA G.
TITLE OF INVENTION: CDNA SEQUENCES OF HUMAN BONE MATRIX PROTEINS
NUMBER OF SEQUENCES: 13
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/432,044
FILING DATE: 03-NOV-1989
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Patent No. 6509026

GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Osteopontin Coated Surfaces and Methods of Use
FILE REFERENCE: cme-100cp

CURRENT APPLICATION NUMBER: US/09/134,253

CURRENT FILING DATE: 1998-08-14

EARLIER APPLICATION NUMBER: 08/916,912

EARLIER PILING DATE: 1997-08-15
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Pred. No. 2e-12;
1; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                       Score 177; DB 6;
Pred. No. 2e-12;
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; Pred. No. 1.4e-
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                     1; Mismatches
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Best Local Similarity 94.4%;
Matches 34; Conservative
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Best Local Similarity 96.9%;
Matches 31; Conservative
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SEQ ID NO 6
LENGTH: 32
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Matches 34; Conservative
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US-09-134-253-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5340934-6; Patent No. 5340934
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SEQ ID NO:6:
LENGTH: 300
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         ROBEY, PAMELA
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US-09-134-253-6
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5340934-8
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APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHEMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: POLYMORPHEMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLOO1307
TITLE OF INVENTION: UNMERS: 60/241,755
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
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                      Sequence 896, Application US/09538092
Sequence 896, Application US/09538092
GENERAL INFORMATION:
APPLICANT: Glot, Loic
APPLICANT: Glot, Loic
TITLE OF INVENTION:
FILE REFERENCE: 15966-542
CURRENT APPLICATION NUMBER: US/09/538,092
CURRENT PILING DATE: 2000-03-29
FRIOR FILING DATE: 1999-04-01
PRIOR FILING DATE: 1999-04-01
PRIOR PILING DATE: 2000-02-01
NUMBER: OF SEQ ID NOS: 1387
SOFTWARE: COMPARE: 2000-02-01
SOFTWARE: CAMPARE: COMPARE: 2000-02-01
SOFTWARE: CAMPARE: CAMPARE: 2000-03-03
SOFTWARE: CAMPARE: CAMPARE
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APPLICANT: TERMINE, JOHN D.;YOUNG, MARIAN F.;FISHER, LARRY W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 181; DB 4; Length 314;
Pred. No. 7.3e-13;
0; Mismatches 1; Indels
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Pred. No. 7.7e-13;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; LOCATION: (0)...(0)
... OTHER INFORMATION: Polypeptide Accession Number P10451
US-09-538-092-8946
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Best Local Similarity 97.2%;
Matches 35; Conservative
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Best Local Similarity 97.2
Matches 35; Conservative
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US-09-538-092-896
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LENGTH: 329
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5340934-6
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Sequence 17, Application US/09485077A

Sequence 17, Application US/09485077A

Patent No. 6458590

GENERAL INPORMATION:
APPLICANT: Wundu, Gopal

APPLICANT: Rundu, Gopal

APPLICANT: Rundu, Gopal

TILE REFERENCE: NIH-05047

CURRENT APPLICATION: Methods and Compositions for Treatment of Restenosis

FILE REFERENCE: NIH-05047

CURRENT APPLICATION NUMBER: 2000-06-23

CURRENT PILING DATE: 1998-07-08

PRIOR APPLICATION NUMBER: 60/054,967

PRIOR APPLICATION NUMBER: 60/054,967

PRIOR APPLICATION NUMBER: 60/054,967

SOFTWARE: Patentin version 3.0

SEQ ID NO 17

LENGTH: 317
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; Patent No. 5340934
; Patent No. 5340934
; RAPLICANT: TERMINE, JOHN D.; YOUNG, MARIAN F.; FISHER, LARRY W.
; ROBEY, PAMELA G.
; TITLE OF INVENTION: CDNA SEQUENCES OF HUMAN BONE MATRIX PROTEINS; NUMBER OF SEQUENCES: 13
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/432,044
FILING DATE: 03-NOV-1989
Patent No. 5340934

APPLICANT: TERMINE, JOHN D.; YOUNG, MARIAN F.; FISHER, LARRY W.
ROBEY, PAMELA PAMELA BONE MATRIX PROTEINS
TITLE OF INVENTION: CDNA SEQUENCES OF HUMAN BONE MATRIX PROTEINS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/432,044
FILING DATE: 03-NOV-1989
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                                                                                                                                                                                                                                                          Length 278;
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68.8%; Pred. No. 9.2e-06;
                                                                                                                                                                                                                                                          35.4%; Score 118; DB 6; 68.8%; Pred. No. 9.2e-06; tive 3; Mismatches 7
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Best Local Similarity 68.8
Matches 22; Conservative
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Best Local Similarity
                                                                                                                                                                                               LENGTH: 278
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US-09-485-077A-17
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                                                                                                                                                                         SEQ ID NO:8:
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GENERAL INFORMATION:
APPLICANT: Ovist, Per
APPLICANT: Bonde, Martin
APPLICANT: Bonde, Martin
TITLE OF INVENTION: A Method for Assaying Collagen Fragments
TITLE OF INVENTION: in Body Fluids, A Test Kit and Means for Carrying Out the
TITLE OF INVENTION: Method and Use of the Method to Diagnose the Presence of
TITLE OF INVENTION: Disorders Associated with the Metabolism of
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5.
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                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO) CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/931,820
                                                                                                                                                                                         APPLICANT:
TITLE OF INVENTION: Assay for collagen degradation
NUMBER OF SEQUENCES: 4
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/963,825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4;
1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: EP 96202596.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18, Application US/08963825 Patent No. 6110689
                                                                                                                              Sequence 1, Application US/08931820; Patent No. 6010863; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
TISSUE TYPE: Collagen type I
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: 805 Third Avenue
New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS: LENGTH: 1057 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: protein HYPOTHETICAL: NO
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Best Local Similarity
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US-08-963-825-18
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US-08-931-820-1
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5; Gaps
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PILING DATE:

CLASSIFICATION: 436

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/187,319
FILING DATE: 21-Jan-1994

ATTORNEY/AGENT INFORMATION:

NAME: GOGOTIS, Adda C

REGISTRATION NUMBER: 29,714

REFERENCE/DOCKET NUMBER: 4305/08701

TELECOMMUNICATION INFORMATION:

TELEFONE: 212-73-6237

TELEFONE: 212-73-6237

TELEFONE: 212-73-6237

TELEFONE: 2140 NO: 18:

TELEFONE: 1341 amino acids

TYPOLOGY: linear

MOLECULE TYPE: protein

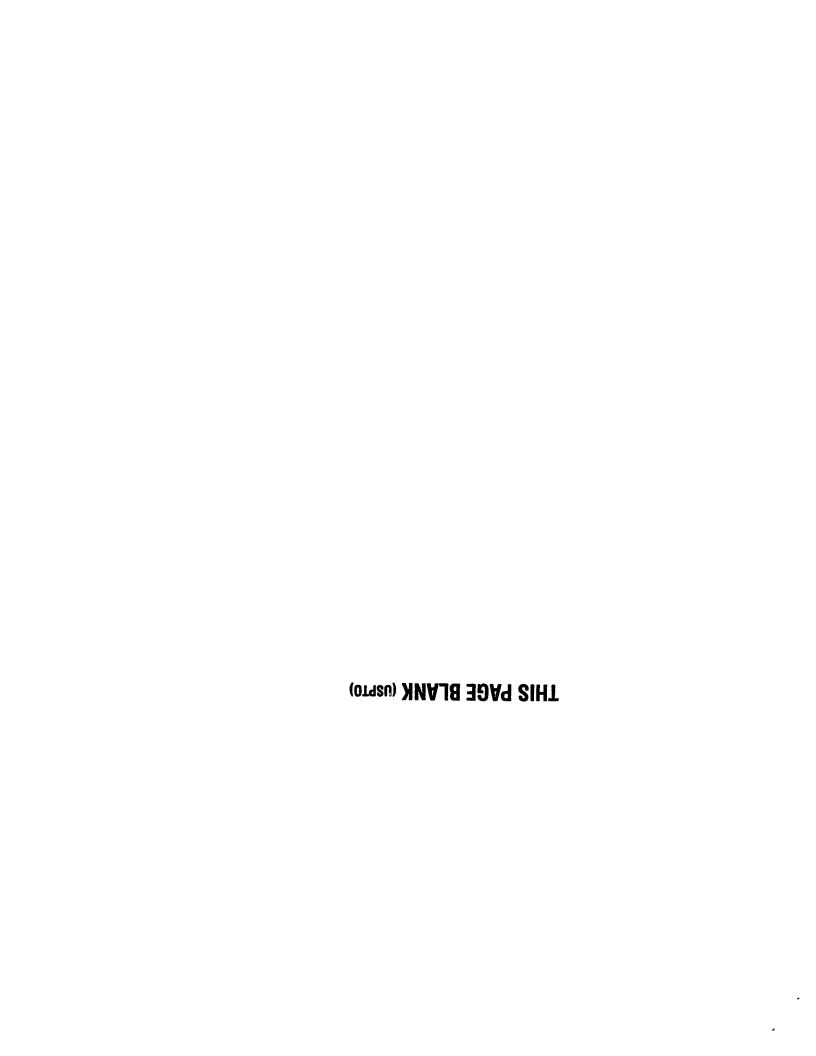
ORGANISM: HOMO sapiens

IMMEDIATE SOURCE:

CLONE: COLLAGEN ALPHA I (I)

US-08-963-825-18
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Search completed: July 27, 2005, 18:16:24 Job time : 46 secs



Sequence 2,

Sequence 229, App Sequence 314, App Sequence 318, App Sequence 145, App Sequence 267, App Sequence 12, App Sequence 112, App Sequence 15, Appl Sequence 15, Appl Sequence 15, Appl Sequence 27, Appl Sequence 31, Appl Sequence 22, Appl Sequence 21, Appl Sequence 21, Appl Sequence 21, Appl Sequence 22, Appl Sequence 22, Appl Sequence 21, Appl Sequence 21, Appl Sequence 22, Appl

Sequence 303, App Sequence 336, App Sequence 60, Appl Sequence 143, App

Sequence

Sequence

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Gaps

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Length 87;

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Score

Regult No.

Sequence 24, Appl Sequence 227, App Sequence 172, App Sequence 1, Appli

Title: Perfect score:

Sequence:

OM protein

Run on:

Scoring table:

Searched:

Database

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APPLICANT: Ashkar, Samy
APPLICANT: Hikita, Sherry
APPLICANT: Hikita, Sherry
APPLICANT: Hikita, Sherry
APPLICANT: Denal, Ghassan
TILE OF INVENTION: Biosynthetic Oncolytic Molecules and Uses Therefor
FILE REFERENCE: CMCC 725
CURRENT FILING DATE: 2002-08-28
CURRENT FILING DATE: 2002-08-28
SOFTWARE: Patentin version 3.1
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 TPVVPTVDTYDGRGDSVVYGRRSKSKKFRRPAGAAGGPAGPAGPAGPAGPAGP
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                             US-09-919-770-2

US-10-097-340-229

US-10-097-340-229

US-10-205-821-305

US-10-17-229-338

US-10-17-229-338

US-10-295-027-508

US-10-295-027-508

US-10-295-027-1333

US-10-295-027-1333

US-10-295-037-508

US-10-295-037-508

US-10-295-037-508

US-10-295-037-508

US-10-687-988-155-4

US-10-678-155-4

US-10-678-155-4

US-10-680-311

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US-10-1849-989-42
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Pred. No. 4.4e-17;
0; Mismatches 1;
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US-09-983-000A-24

US-10-97-340-227

US-10-171-311-172

US-10-303-583-1

US-10-205-823-303

US-10-205-823-303

US-10-241-220-60

US-10-301-822-143
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 6, Application US/10220107
Publication No. US20040034193A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 2
US-10-900-512-6
; Sequence 6, Application US/10900512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
70.9%;
Best Local Similarity 86.8%;
Matches 46; Conservative (
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Sequence 31, Appli
Sequence 231, App
Sequence 176, App
Sequence 307, App
Sequence 147, App
Sequence 6, App
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Sequence 6, Appli
Sequence 41, Appl
                                                                                                                                           (without alignments)
159.133 Million cell updates/sec
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1 RSRRATEVFTPVVPTVDTYD......AGGPAGPAGPAGPAGPA
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| Cgn2_6/ptodata1/lpubpaa/USO7_PUBCOMB.ppp:*
| Cgn2_6/ptodata1/lpubpaa/USO7_NEW_PUB.pep:*
| Cgn2_6/ptodata1/lpubpaa/USO6_PUBCOMB.pep:*
| Cgn2_6/ptodata1/lpubpaa/USO6_PUBCOMB.pep:*
| Cgn2_6/ptodata1/lpubpaa/USO7_NEW_PUB.pep:*
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| Cgn2_6/ptodata1/lpubpaa/USO8_PUBCOMB.pep:*
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             GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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US-09-805-020-41
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US-10-187-975-120
US-10-477-876-3
US-10-477-876-3
US-10-171-311-176
US-10-205-823-307
US-10-301-822-147
US-10-678-355-6
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Maximum Match 100%
Listing first 45 summaries
                                                                                   - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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           GENERAL INFORMATION:
APPLICANT: Ashkar, Samy
APPLICANT: Hikita, Sheary
TILE REFERENCE: CMC 725 CIP
CURRENT FILING DATE: 2004-07-28
PRIOR PELING DATE: 2003-07-31
PRIOR PLING DATE: 2003-07-31
PRIOR PLING DATE: 2003-07-31
PRIOR PELING DATE: 2001-06-18-8
PRIOR PLING DATE: 2001-06-13
PRIOR PLING DATE: 2001-06-13
PRIOR PLING DATE: 2000-06-13
PRIOR PLING DATE: 2000-06-13
PRIOR PLING DATE: 2000-06-13
SEQ ID NOS: 18
SEQ ID NO 6
LENGTH: 87
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i Sequence 41, Application US/09805020

j Publication No. US20020086384A1

j GENERAL HECRAMATION:

j APPLICANT: LEVINE, Zurit

j TITLE OF INVENTION: SPLICE VARIANTS OF ONCOGENES

j FILE REFERENCE: 2786-0168P

j CURRENT APPLICATION NUMBER: US/09/805,020

j CURRENT FILING DATE: 2001-03-13

j SOFTWARE: Patentin Ver. 2.1

j SEQ ID NO 41

j LENGTH: 192

j TYPE: PRT

TYPE: RT

USGADNISM: Homo sapiens

US-09-805-020-41
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
70.9%; Score 236; DB 17;
Best Local Similarity 86.8%; Pred. No. 4.4e-17;
Matches 46; Conservative 0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  , OTHER INFORMATION: Synthetic Peptide US-10-900-512-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Sequence 120, Application US/10187975
; Publication No. US20030224982A1
; GENERAL INFORMATION:
Publication No. US20050048614A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
US-10-187-975-120
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APPLICANT: Li, Li
APPLICANT: Shenoy, Suresh
APPLICANT: Betturajan, Meera
APPLICANT: Ellerman, Karen
APPLICANT: Gorman, Linda

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Sequence 3, Application US/10477876; Publication No. US20040235720A1; Publication No. US20040235720A1; GENERAL INFORMATION: Applied Research Systems ARS Holding N.V.; TITLE OF INVENTION: Use of osteopontin for the treatment and/or prevention of demyelu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
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CURRENT APPLICATION: NUMBER: US/10/187,975

CURRENT FILING DATE: 2002-07-02

PRIOR PILING DATE: 2001-07-05

PRIOR PLING DATE: 2001-07-11

PRIOR PLING DATE: 2001-07-12

PRIOR PLING DATE: 2001-07-12

PRIOR PLING DATE: 2001-07-12

PRIOR PLING DATE: 2001-07-12

PRIOR PLING DATE: 2001-07-13

PRIOR PLING DATE: 2001-07-14

PRIOR PLING DATE: 2001-07-16

PRIOR PLING DATE: 2001-07-16

PRIOR PLING DATE: 2001-07-17

PRIOR PLING DATE: 2001-07-27

PRIOR PLING DATE: 2001-07-27

PRIOR PLING DATE: 2001-07-27

PRIOR PLING DATE: 2001-07-30

PRIOR PLING DATE: 2001-07-30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Vernte, Corine
TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: SAME, AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       128 ATEVFTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP 163
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                                                                                       Edinger, Shlomit
Hjalt, Tord
Gerlach, Valerie
Shimkets, Richard
Taupier, Raymond J. Jr.
Andergon, David
                                                                                                                                                                                                                                                                                                             Baumgartner, Jason
Padigaru, Muralidhara
Peyman, John
Smithson, Glennda
Casman, Stacie
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SOFTWARE: CuraSeqList version 0.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Voss, Edward
Boldog, Ferenc
Pena, Carol
Chapoval, Andrei
Rastelli, Luca
Catterton, Blina
Spytek, Kimberly
Miller, Charles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kekuda, Ramesh
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-477-876-3
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APPLICANT: Chen, Yan
APPLICANT: Chen, Yan
APPLICANT: Anonahan, John
APPLICANT: Anonahan, John
APPLICANT: Kamerkar, Shubhangi
APPLICANT: Kamerkar, Shubhangi
APPLICANT: Ganavarapu, Manjula
APPLICANT: Glatt, Karen
APPLICANT: Glatt, Karen
APPLICANT: Hoersh, Sebastian
ITILE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY
ITILE OF INVENTION: OF CERVICAL CANCER
ITILE OF INVENTION: OF CERVICAL CANCER
ITILE OF INVENTION: 06 CONTOR 
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TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AILLE OF INVENTION: THERAPY OF PROSTATE CANCER
FILE REFERENCE: MRI-044
CURRENT APPLICATION NUMBER: US/10/205,823
CURRENT FILING DATE: 2002-07-25
               Gaps
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               1; Indels
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Pred. No. 7.8e-11;
               0; Mismatches
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SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                    Sequence 176, Application US/10171311 Publication No. US20030087270A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2002-07-25
PRIOR APPLICATION NUMBER: 60/307,982
PRIOR FILING DATE: 2001-07-25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hoersch, Sebastian
Kamatkar, Shubhangi
Wonsey, Angela M.
Glatt, Karen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 54.4%;
Best Local Similarity 97.2%;
Matches 35; Conservative
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APPLICANT: Schlegel, Robert
APPLICANT: Monaban, John B.
APPLICANT: Endege, Wilson O.
APPLICANT: Gannavarapu, Manj
               35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
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           Matches
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TITLE OF INVENTION: Masessment, Prevention, and Therapy of Ovarian Cancer
TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
CURRENT APPLICATION NUMBER: US/10/097,340

CURRENT FILING DATE: 2002-03-14

PRIOR PLING DATE: 2001-03-14

PRIOR PLING DATE: 2001-03-14

PRIOR PLING DATE: 2001-03-14

PRIOR FILING DATE: 2001-09-26

PRIOR FILING DATE: 2001-09-26

PRIOR FILING DATE: 2001-09-10

PRIOR FILING DATE: 2001-09-10
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Pred. No. 7.8e-11;
                          FILE REFERENCE: WO 473
CURRENT APPLICATION NUMBER: US/10/477,876
CURRENT FILING DATE: 2003-11-17
PRIOR APPLICATION NUMBER: 01111296
PRIOR FILING DATE: 2001-05-17
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PATCHIIN VETSION 3.1
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 231, Application US/10097340 Publication No. US20030087250A1
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Sebastian HOERSCH
Shubhangi KAMATKAR
Steve G. KOVATS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gordon B. MILLS
Robert C. BAST, Jr.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rosemarie SCHMANDT
Xumei ZHAO
Karen GLATT
TITLE OF INVENTION: diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rachel E. MEYERS
Michael MORRISEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best_Local Similarity 97.2
Matches 35; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Publication No. US2003008
GENERAL INFORMATION:
APPLICANT: John MONAHAN
APPLICANT: Manjula GANN
                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Peter VEIBY
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US-10-097-340-231
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Best Local Similarity
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APPLICANT:
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APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Guillemette, Tracy L.
APPLICANT: Schlegel, Robert
APPLICANT: Schlegel, Robert
APPLICANT: Schlegel, Robert
APPLICANT: Thibodeau, Stephen J.
APPLICANT: Thibodeau, Stephen J.
APPLICANT: Howerence J.
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, THERAPY OF COLON CANCER
TITLE OF INVENTION: THERAPY OF COLON CANCER
TITLE OF INVENTION: THERAPY OF COLON CANCER
TITLE OF INVENTION: MOMBER: US 10/301,822
CURRENT FILING DATE: 2001-12-10
PRIOR FILING DATE: 2001-12-10
PRIOR FILING DATE: 2001-12-10
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 2002-03-05
PRIOR FILING DATE: 202-03-05
PRIOR PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 202-03-05
PRIOR FILING DATE: 202-03-05
PRIOR PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR PRIOR PRIOR DATE: 202-03-05
PRIOR PRIOR PRIOR DATE: 202-03-05
PRI
                                                                             Gaps
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Score 181; DB 14; Length 287;
Pred. No. 7.8e-11;
0; Mismatches 1; Indels (
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Sequence 6, Application US/10678355

PUblication No. US20040142865A1

GENERAL IMPORATION:
TITLE OF INVENTION: OSTEDONIN-BASED CANCER THERAPIES

FILE REPERRENCE: 00398-148001

CURRENT APPLICATION NUMBER: US/10/678,355

CURRENT APPLICATION NUMBER: US 60/415,712

PRIOR APPLICATION NUMBER: US 60/415,712

PRIOR FILING DATE: 2003-10-02

NUMBER OF SEQ ID NOS: 9

SOFTWARE: PASESEQ for Windows Version 4.0

SEQ ID NO 6

LENGTH: 287
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                                                                                                                                                                                                        115 ATEVFTPVVPTVĎTYĎGRGĎSVVÝGĽRSKSKKFRRP 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              54.4%; Score 181; DB 14; 97.2%; Pred. No. 7.8e-11; trive 0; Mismatches 1;
                                                                                                                                                5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP 40
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Pred. No. 7.8e-11;
                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 147, Application US/10301822
; Publication No. US20030148410A1
; PENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals, Inc.
              54.4%;
97.2%;
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97.2%;
       Query Match
Best Local Similarity 97.2*
Matches 35; Conservative
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, ORGANISM: Homo sapiens
US-10-678-355-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo Sapiens
US-10-301-822-147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
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Best Local Similarity
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APPLICANT: Mills, Gordon B.
APPLICANT: Mills, Gordon B.
TITLE OF INVENTION: COMPOSITIONS, KITS, AND METHODS FOR IDENTIFICATION, ASSESSMENT,
TITLE OF INVENTION: COMPOSITIONS, KITS, AND THERAPY OF BREAST CANCER
TITLE OF INVENTION: UNBER: US/10/177,293
CURRENT PAPLICATION NUMBER: US/10/177,293
CURRENT FALING DATE: 2002-06-21
PRIOR FILING DATE: 2001-06-27
PRIOR APPLICATION NUMBER: US 60/301,572
PRIOR FILING DATE: 2001-06-27
PRIOR FILING DATE: 2001-06-27
PRIOR FILING DATE: 2001-06-27
PRIOR FILING DATE: 2001-09-25
PRIOR FILING DATE: 2001-09-26
PRIOR FILING DATE: 2002-03-06
PRIOR FILING DATE: 2002-03-06
PRIOR FILING DATE: 2002-03-06
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               115 ATEVETPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP 150
   PRIOR APPLICATION NUMBER: 60/314,356
PRIOR FILING DATE: 2001-08-22
PRIOR APPLICATION NUMBER: 60/325,020
PRIOR FILING DATE: 2001-09-25
PRIOR FILING DATE: 2001-09-25
PRIOR APPLICATION NUMBER: 60/341,746
PRIOR APPLICATION NUMBER: 60/362,158
PRIOR PILING DATE: 2001-03-05
NUMBER OF SEQ ID NOS: 455
SOFTWARE: FBSESEQ for Windows Version 4.0
SEQ ID NO 307
LENGTH: 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2002-05-14
NUMBER OF SEQ ID NOS: 506
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 340
LENGTH: 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/10177293
o. US20030124128A1
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Pusztai, Lajos
Meric, Funda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xu, Yongyao
Hoersch, Sebastian
Monahan, John
Meyers, Rachel E.
Bast Jr., Robert C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gannavarpu, Manjula
Kamatkar, Shubhangi
Mertens, Maureen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Myer, Vic
Wang, Youzhen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Lillie, James
APPLICANT: Glatt, Karen
                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
CORGANISM: Homo sapiens
US-10-205-823-307
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Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-177-293-340
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RESULT 13
US-10-477-876-2
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US-09-919-770-2
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                           Query Match
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TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: SAME, AND METHODS OF USE
FILE REFERENCE: 210-2-397A
CURRENT APPLICATION NUMBER: US/10/187,975
CURRENT PILING DATE: 2001-07-02
PRIOR FILING DATE: 2001-07-09
PRIOR PLILING DATE: 2001-07-09
PRIOR PLILING DATE: 2001-07-01
PRIOR PLILING DATE: 2001-07-11
PRIOR PLILING DATE: 2001-07-12
PRIOR FILING DATE: 2001-07-13
PRIOR PLILING DATE: 2001-07-13
PRIOR PLILING DATE: 2001-07-13
PRIOR PLILING DATE: 2001-07-14
PRIOR PLILING DATE: 2001-07-15
PRIOR PLILING DATE: 2001-07-16
PRIOR PLILING DATE: 2001-07-16
PRIOR PLILING DATE: 2001-07-16
PRIOR PLILING DATE: 2001-07-16
PRIOR PLILING DATE: 2001-07-17
PRIOR PLILING DATE: 2001-07-24
PRIOR PLILING DATE: 2001-07-27
    Gaps
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NUMBER OF SEO ID NOS: 288
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0
  Indels
                                                                         115 ATEVFTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP 150
                                              5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP 40
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Edinger, Shlomit
Hjalt, Tord
Gerlach, Valerie
Shimkets, Richard
Taupier, Raymond J. Jr.
                                                                                                                                                                                                         Sequence 48, Application US/10187975
Publication No. US20030224982A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Baumgartner, Jason
Padigaru, Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peyman, John
Smithson, Glennda
Casman, Stacie
Voss, Edward
                                                                                                                                                                                                                                                                                                                             Patturajan, Meera
Ellerman, Karen
Gorman, Linda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Boldog, Ferenc
Pena, Carol
Chapoval, Andrei
Rastelli, Luca
Kekuda, Ramesh
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Spytek, Kimberly
Miller, Charles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        David
35; Conservative
                                                                                                                                                                                                                                                                            APPLICANT: Li, Li
APPLICANT: Shenoy, Suresh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Guo, Xiaojia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 48
LENGTH: 290
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anderson,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-187-975-48
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Matches
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Sequence 2, Application US/10477876

Publication No. US20040235720A1

GENERAL INFORMATION:

APPLICANT: Applied Research Systems ARS Holding N.V.

TITLE OF INVENTION: Use of osteopontin for the treatment and/or prevention of demyel

TITLE OF INVENTION: Use of osteopontin for the treatment and/or prevention of demyel

TITLE OF INVENTION: Use of osteopontin for the treatment and/or prevention of demyel

FILE REFERENCE: W 473

CURRENT APPLICATION NUMBER: US/10/477,876

CURRENT APPLICATION NUMBER: 01111296

PRIOR FILING DATE: 2001-05-17

NUMBER OF SEQ ID NOS: 5

SOFTWARE: Patentin version 3.1

SEQ ID NO 2

LENGTH: 299
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APPLICANT: Ratner, Buddy
APPLICANT: Giachelli, Cecilia
APPLICANT: Martinson, Laura
APPLICANT: Martinson, Marta
TITLE OF INVENTION Methods and Devices to Modulate the Wound Response
FILE REFERENCE: UOFW117618
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     Length 290;
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                                                       Indels
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Score 181; DB 15;
Pred. No. 7.9e-11;
0; Mismatches 1;
                                                                                                       5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 54.4%; Score 181; DB 16; Best Local Similarity 97.2%; Pred. No. 8.1e-11; Matches 35; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP 40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/222,071
PRIOR FILING DATE: 2000-08-01
WIMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin version 3.0
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 2, Application US/09919770; Patent No. US20020048577A1; GENERAL INFORMATION:
ch 54.4%;
1 Similarity 97.2%;
35; Conservative
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APPLICANT: Kyriakides, Th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo Sapien
                          Best Local Similarity
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Matches 35; Conserv
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APPLICANT: Peter CLANUT:
APPLICANT: Peter CLANUT:
APPLICANT: Peter VEIBY
APPLICANT: Octon B MILLS
APPLICANT: Gordon B MILLS
APPLICANT: Gordon B MILLS
APPLICANT: Robert C. BAST, Jr.
APPLICANT: Robert C. BAST, Jr.
APPLICANT: Robert C. BAST, Jr.
APPLICANT: Robert CLAND
APPLICANT: Raren LU
APPLICANT: Aren GLAND
TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
TITLE OF INVENTION: MUMBER: 60/276,025
FRIGE REFERENCE: MILLOG
FRICK PELLING DATE: 2001-03-14
FRIOR PELLOR HUMBER: 60/325,149
FRIOR PILLNG DATE: 2001-03-14
FRIOR PILLNG DATE: 2001-03-14
FRIOR PILLNG DATE: 2001-03-14
FRIOR PELLNG DATE: 2001-03-16
FRIOR FILLNG DATE: 2001-03-19
FRIOR FILLNG DATE: 2001
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RESULT 15
US-10-097-340-229

Sequence 229, Application US/10097340

PUBLIcation No. US200330087250A1

GENERAL INFORMATION:
APPLICANT: John MONAHAN

APPLICANT: Marjula GANNAVARAPU

APPLICANT: Sebastian HOERSCH

APPLICANT: Steve G. KOVATS

APPLICANT: Steve G. KOVATS

APPLICANT: Reachel E. MEYERS

APPLICANT: Reachel E. MEYERS

APPLICANT: Peter OLANDT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
CORGANISM: Homo sapiens
US-10-097-340-229
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Search completed: July 27, 2005, 18:28:26 Job time: 155 secs

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OM protein - protein search, using sw model

Run on:

July 27, 2005, 18:05:17 ; Search time 39 Seconds (without alignments) 155.427 Million cell updates/sec

US-09-981-845-11 333 1 RSRRATEVFTPVVPTVDTYD.....AGGPAGPAGPAGPAGPA 63 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

283416 Total number of hits satisfying chosen parameters:

283416 seqs, 96216763 residues

Searched:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

\$ Query Match Length DB ID Description	1	. Stephen of the component	.6 303 1 GEPGO	.5 311 1 JC1191 osteopontin		.2 407 2 G90907 probable tai	osteopontin	.3 301 2 JC5811 osteopontin	.3 317 1 A25917 osteopontin p	2.3 366 2 S11449	2.3 423 2 A41207	2 T35878 hypothetical	9.1 437 2 H90854 probable tail	9.1 439 2 C90769	.8 1464 2 S59856 collagen	8.7 1464 1 CGHUIS	.7 1486 1 B40333 collagen	8.5 283 2 T32921 hypothetical pr	8.5 294 2 T29838 hypothetical	8.2 361 2 H90877 probable tail	8.2 437 2 E90996 probable	.2 439 2 A85719	8.2 439 2 A85741 Āypotheti	7.9 283 2 T29837 hypothetical	.9 294 2 T29839 hypothetical	2 G85631 hypothetical	SLH family or	7.9 437 2 R90968	ייי ב הייים מייים מייים מייים מייים מייים מייים
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Score	101	101	128.5	121.5	118	114	113	111	111	107.5	107.5	96	76	97	96	95.5	95.5	95	95	94	94	94	94	93	93	93	93	93	
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hypothetical prote collagen UCOL1 - p	collagen – chicken collagen alpha l(I collagen alpha l(I	hypothetical prote collagen alpha 1(I	collagen arms 2(1 collagen alpha 2(1 la costa protein - collagen 2 - Caeno	ORF3 protein - sai hypothetical prote	collagen arona in collagen, cuticula hypothetical prote
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92.5	8 6 6 8 7 7 8	91.5 91.5 5	91.5	200	000
30	2 6 8 2 6 4	35 36 77	8 6 0 8 6 0	444	444

ALIGNMENTS

RESULT 1 S09575 OSTOROTION precursor, splice form A - human N;Alternate names: bone sialoprotein I; lactopontin; milk protein, 75K; secreted phosph N;Contains: osteopontin, splice form B; osteopontin, splice form C
 C.; Aprocise: Now Saptum Numan, Numan, C.; Approcise: Now Saptum Numan-1994 #text change 09-Jul-2004 C; Accession: S50028; S09575; A35326; JQ1529; I56986; I76601; I76602; A41802; S04505 S1Hijiyav, N.; Setoquchi, M.; Matsuura, K.; Higuchi, Y.; Akizuki, S.; Yamamoto, S. Biochem, J. 303, 255-262. 1994
A;Title: Cloning and characterization of the human osteopontin gene and its promoter. A;Reference number: S50028; MUID:95031968; PMID:7945249 A;Accession: S50028
A;Cross-references: UNIPROT:P10451; EMBL:D14813; NID:9506341; PIDN:BAA03554.1; PID:9506 A:Note: the authors translated the codon GTG for residue 5 as Tyr K:Riefer, M.C.; Bauer, D.M.; Barr, P.J.
NUCLEIC ACIDS KEB. 17, 3306, 1989 A;Title: The CDNA and derived amino acid sequence for human osteopontin. A;Reference number: S09575; MUID:89263749; PMID:2726470
A.Molecule trype: mRNA A.Residues: 1-314 <kie></kie>
A.Cross-references: EMBL:X13694; NID:g35147; PIDN:CAA31984.1; PID:g35148 K.Young, M.F.; Kerr, J."H; Termine, J.D.; Wewer, U.M.; Ge Wang, M.; McBride, O.W.; Fish Genomics 7. 491-502. 1990
A,Title: cDNA cloning, mRNA distribution and heterogeneity, chromosomal location, and R A,Reference number: A35326; MUID:90353945; PMID:1974876 A,Accession: A35326
A.CLOSE-TELETERICES: GENOWARD; NIL:1918-91-4; FIDN:144A59974.1; FID:1918-94U5 R.Kohri, K.; Suzuki, Y.; Yoshida, K.; Yamamoto, K.; Amasaki, N.; Yamate, T.; Umekawa, T. Biochem. Biophys. Res. Commun. 184, 859-864, 1992
A, Title: Molecular cloning and sequencing of cDNA encoding urinary stone protein, which A, Reference number: JQ1529; MUID:92246977; PMID:1575754
Afacession: UQIS29 A/Status: translation not shown A/Molecule type: mRNA
Affebludes: 0/-1/3 KACA? Affeperimental source: kidney R.Saitoh, Y.; Kuratsu, Takeshima, H.; Yamamoto, S.; Ushio, Y.
Day: invest: '2, 33-83, 1353 A;Title: Expression of osteopontin in human glioma. Its correlation with the malignancy A;Reference number: IS6986; MUID:95139605; PMID:7837791 A:Accession: TE6886
A.Status: pre-liminary; translated from GB/EMBL/DDBJ A;Molecule type: mRNA A;Residues: 1-187,'H',189-236,'A',238-314 <saii></saii>
A;Cross-references: GB:D28759; NID:g633074; PIDN:BAA05949.1; PID:g992948

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A/Cross-references: EMBL:M84121; NID:g164599; PIDN:AAA31094.1; PID:g164600
C;Comment: This protein is an acidic glycoprotein rich in aspartic acid, glutamic acid,
C;Superfamily: osteoponia soceoponia status predicted <SIG>
F;1-16/Domain: signal sequence #status predicted <SIG>
F;1-16/Pomain: signal sequence #status predicted <SIG>
F;1-30/Product: osteoponian #status experimental <MAT>
F;86-39/Region: aspartic acid-rich
F;154-156/Region: cell attachment (R-G-D) motif
F;154-156/Region: cell attachment (R-G-D) motif
F;154-303/Product: 23K glycoprotein #status experimental <23K>
F;199-303/Product: 20K glycoprotein #status experimental <23K>
F;79/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          osteopontin precursor - rabbit

N.Alternate names: bone sialoprotein I; secreted phosphoprotein I
CiSpecies: Orycolagus cuniculus (domestic rabbit)
CiSpecies: Orycolagus cuniculus (domestic rabbit)
CiDate: 30-Jun-1993 #sequence ravision 30-Jun-1993 #text_change 09-Jul-2004
CiAccession: JC1191; S54977; S54976
CiAccession: JC1191; S54977; S54976
CiAccession: JC1191; S4977; S4977; S1997 P.J.; Tanaka, K.; Matsuo, T.; Ohta, M.; K
Biochem. Biophys. Res. Commun. 186, 911-917, 1992
A;Title: Identification of osteopontin in isolated rabbit osteoclasts.
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C;Keywords: bone; cell binding; extracellular matrix; phosphoprotein; sialoglycoprotein
F;1-16/Domain: signal sequence #status predicted <SIG>
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A;Cross-references: EMBL:D16544; NID:g538244; PIDN:BAA03980.1; PID:g538245
C;Comment: This protein is an acidic glycoprotein rich in aspartic acid, glutamic acid,
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A;Residues: 17-36;172-211 <ZHA>
Ry Zhang, Q.; Wram, J.L.; Sodek, J.
Eur. J. Biochem. 207, 649-659, 1992
A;Title: Characterization of the promoter region of the porcine opn (osteopontin,
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Pred. No. 1.6e-05;
1; Mismatches 5;
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A, Status: nucleic acid sequence not shown
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80.0%;
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Best Local Similarity
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A; Residues: 1-18 <ZH2>
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                       A; Accession: A35204
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A;Accession: 176601
A;Accession: Preliminary translated from GB/BMBL/DBDJ
A;Accession: Preliminary translated from GB/BMBL/DBDJ
A;Accession: 17660
A;Accession: 1760
B;Accession: 1760
B;Accession: 1760
A;Accession: 1760
B;Accession: A4802
A;Accession: A4802
A;A
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NyAlternate names: bone sialoprotein I; phosphoprotein I, secreted
NyAlternate names: bone sialoprotein; 23K glycoprotein;
C; Species: Sus scrofa domestica (domestic pig)
C; Date: 31-Dec-1991 #sequence revision 31-Dec-1991 #text_change 09-Jul-2004
C; Date: 31-Dec-1991 #sequence of porcine secreted phosphoprotein-I (SPP-I, osteopon R; Wrana, J.L.; Zhang, Q.; Sodek, J.
Nucleic A; Reference number: S14903; MUID:90098793; PMID:2602123
A; Molecule type: mRNA
A; Molecule type: mRNA
A; References: UNIPROT: P14287; EMBL: X16575; NID: 92120; PIDN: CAA34594.1; PID: 92121
R; Zhang, Q.; Domenicucci, C.; Goldberg, H.A.; Wrana, J.L.; Sodek, J.
J. Biol. Chem. 265, 7883-7899, 1990
A; Title: Characterization of fetal porcine bone sialoproteins, secreted phosphoprotein I is derived from the carboxyl terminus of SPPI.
A; Reference number: A35204; MUID:90237064; PMID:2332443
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Best Local Similarity 97.2%; Pred. No. 1.2e-10;
Matches 35; Conservative 0; Mismatches 1
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R;Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.G gasawara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori, M.; Shinagawa, H. DNA Res. 8, 11-22, 2001

A;Title: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 and gen. A;Recession: G90907

A;Recession: G90907

A;Residues: preliminary

A;Residues: 1-407 <HAY>

A;Residues: 1-407 <HAY
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C; Species: Mus musculus (house mouse)
C; Date: 12-Feb-1993 #sequence revision 27-Jun-1994 #text change 09-Jul-2004
C; Accession: A37818; S04078; S12064; A33853; JL0105; A60931; S11677
R; Miyazaki, Y.; Setoguchi, M.; Yoshida, S.; Higuchi, Y.; Akizuki, S.; Yamamoto, S.
A; Mijori, Chem. 265, 14432-14438, 1990
A; Title: The mouse osteopontin gene. Expression in monocytic lineages and complete nucl A; Reference number: A37818; MUID:90354433; PMID:2387863
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A; Residues: 1-121, 'F', 123-294 < YAM>
A; Residues: 1-121, 'F', 123-294 < YAM>
A; Cross-references: EMBL:X51834; NID:953520; PIDN:CAA36132.1; PID:9297546
B; Craig, A.M.; Smith, J.H.; Denhardt, D.T.
J. Biol. Chem. 264, 9682-9689, 1989
A; Title: Osteopontin, a transformation-associated cell adhesion phosphoprotein, is inducable to the continuation of the continua
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A; Residues: 1-98,'G', 100-294 «CRA»
A; Cross-references: GB:J04806; NID:g200157; PIDN:AAA57265.1; PID:g200158
A; Patearca, R.; Preeman, G.J.; Singh, R.P.; Wei, F.Y.; Durfee, T.; Blattner, F.; Regnier,
J. Exp. Med. 170, 145-161, 1989
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R;Miyazaki, Y.; Setoguchi, M.; Yoshida, S.; Higuchi, Y.; Akizuki, S.; Yamamoto,
Nucleic Acids Res. 17, 3298, 1989
A;Title: Nucleotide sequence of cDNA for mouse osteopontin-like protein.
A;Reference number: S04078; MUID:89263742; PMID:2726465
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A,Residues: 1-294 <MI2>
A,Cross-references: EMBL:X13986; NID:g53755; PIDN:CAA32165.1; PID:g53756
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Pred. No. 0.00056;
5; Mismatches 23;
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C;Superfamily: phage lambda hypothetical protein 401
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submitted to the EMBL Data Library, January 1990
A;Reference number: $12064
A;Accession: $12064
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Best Local Similarity 48.6%;
Matches 34; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-294 <MIY>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Accession: JL0105
A; Molecule type: mRNA
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A,Residues: 1-278 «KER»
A,ACross=references: GBH M66236
A,Cross=references: GBH M66236
A,Title: Identification of two phosphorylation motifs in bovine osteopontin.
B,ACCSSION: PC2024
A,Title: Identification of two phosphorylation motifs in bovine osteopontin.
A,Recession: PC2024
A,MOLECULE type: protein
A,Residues: 17-30,36-55,A',57-70,153-161,167-215,250-278 «SOR»
B,ADDFWS: RES: Commun. 177, 1205-1210, 1991
A,MOLECULE type: protein
A,Residues: 17-30,36-55,A',57-70,153-161,167-215,250-278 «SOR»
B,ADDFWS: RES: Commun. 177, 1205-1210, 1991
A,ACCSSION: PO0160
A,MOLECULE type: protein
A,Residues: 17-21, LTPF * RRIA
A,Residues: 17-21, LTPF * RRIA
A,ROTE: 22-Thr and 23-Ser were also found
C,Comment: This protein is an acidic glycoprotein rich in aspartic acid, glutamic acid, C,Comment: This protein is thought to anchor osteoclasts to bone.
C,Superfamily: osteopontin #status predicted * SIG,*
F,17-278/Product: osteopontin #status experimental * C,Reywords: bone, cell binding, extracellular matrix; phosphoprotein; sialoglycoprotein F,86-93/Region: appartic acid-rich
F,86-324-26,27,60,62-3,184,188,205,210,667,222,24/Binding site: phosphate (Ser) (covale F,732,44,26,27,60,62,3,184,188,205,210,67,272,74/Binding site: packpohydrate (Asn), (covalent) # F,723,44,26,27,60,62,3,184,188,205,210,67,272,274/Binding site: carbohydrate (Asn), (covalent) # Retaus predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Superfamily: Osteopontin
C; Superfamily: Osteopontin
C; Superfamily: Osteopontin
C; Reywords: bone; cell binding; extracellular matrix; phosphoprotein; sialoglycoprotein
C; Reywords: bone; cell binding; extracellular matrix; phosphoprotein; signal sequence #status predicted <21G>
F; 17-28/Product: osteopontin #status experimental <NAT>
F; 86-93/Region: aspartic acid-rich
F; 152-154/Region: cell attachment (R-G-D) motif F; 153, 24, 26, 27, 60, 62, 63, 184, 188, 205, 210, 267, 272, 274/Binding site: phosphate (Ser) (covalent)
F; 79/Binding site: carbohydrate (Thr) (covalent) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               probable tail fiber protein [imported] - Escherichia coli (strain O157:H7, substrain RIM C;Species: Escherichia coli C;Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 09-Jul-2004 C;Accession: G90907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        osteopontin precursor - bovine

NyAlternate names: bone sialoprotein I; phosphoprotein I, secreted
C;Species: Bos primigenius taurus (cattle)
C;Date: 30-Uun-1992 #sequence revision 27-Jun-1994 #text_change 10-Sep-1999
C;Accession: JS0638; PC2024; PQ0160
R;Kerr, J.W.; Fisher, L.W.; Termine, J.D.; Young, M.F.
A;Title: The CDNA cloning and RNA distribution of bovine osteopontin.
A;Reference number: JS0638; MUID:92084141; PMID:1721033
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                       #status predicted
                                                                                                                                                                                                                                                                                                                                      Length 311;
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Pred. No. 8e-05;
2; Mismatches 5;
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Best Local Similarity 68.8%; Pred. No. 0.00016;
Matches 22; Conservative 3; Mismatches 7;
                                                    F;17-311/Product: osteopontin #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   138 ATTVFTEVVPTVETYDGRGDSVAYRLKRSKSKMF 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 ATEVFTPVVPTVDTYDGRGDSVVYG-RRSKSKKF 37
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                                                                                                   F;86-95/Region: aspartic acid-rich
F;155-157/Region: cell attachment (R-G-D) motif
F;103/Binding site: carbohydrate (Asn) (covalent)
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                                                                                                                                                                                                                                                                                                                           Query Match 36.5%;
Best Local Similarity 76.5%;
Matches 26; Conservative
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Risingh, K.; Mukherjee, A.B.; De Vouge, M.W.; Mukherjee, B.B.
J. Biol. Chem. 267, 23847-23851, 1992
A;Title: Differential processing of osteopontin transcripts in rat kidney- and osteoblas
A;Reference number: A45132; MUID:93054745; PMID:1429723
                                                                                                                                                                                                                                                                                                                          A.Molecule type: protein
A;Residues: 272-282 <SIN2>
A;Residues: 272-282 <SIN2>
A;Residues: 272-282 <SIN2>
A;Note: sequence extracted from NCBI backbone (NCBIP:118871)
R;Prince, C.W.; Oosawa, T.; Butler, W.T.; Tomana, M.; Bhown, A.S.; Bhown, M.; Schrohenlon C. Biol. Chem. 262, 2900-2907, 1987
A;Title: Isolation, characterization, and biosynthesis of a phosphorylated glycoprotein A;Reference number: S28772; MUID:87137549; PMID:3469201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cancer Res. 48, 5770-5774, 1988
A;Title: Secreted phosphoproteins associated with neoplastic transformation: close homol
A;Reference number: A45925; MUID:89002730; PMID:3167835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       collagen short chain - freshwater sponge (Ephydatia muelleri) (fragment)
C;Species: Ephydatia muelleri
C;Species: Ephydatia muelleri
C;Species: Ephydatia muelleri
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Jul-2004
C;Accession: S11449
R;Exposito, J.Y.; Ouazana, R.; Garrone, R.
Ebr. J. Biochem. 190, 401-406, 1990
A;Title: Cloning and sequencing of a Porifera partial cDNA coding for a short-chain coll
A;Reference number: S11449; MUID:90306040; PMID:2163843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Superfamily: osteopontin
Keywords: bone, cell binding; extracellular matrix; phosphoprotein; sialoglycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: protein
A;Residues: 17-25 <SE2>
C;Comment: This protein is an acidic glycoprotein rich in aspartic acid, glutamic acid,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPROT:P18503; EMBL:X52598; NID:g9297; PIDN:CAA36831.1; PID:g9298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Modecule type: protein
A; Residues: 17-26;155-167 <SEN>
R; Senger, D.R.; Perruzzi, C.A.; Gracey, C.F.; Papadopoulos, A.; Tenen, D.G.
Cancer Res. 48, 5770-5774, 1988
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Pred. No. 0.00087;
4; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                          A; Experimental source: kidney
A;Note: sequence extracted from NCBI backbone (NCBIP:118869)
A;Accession: B45132
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F;144-146/Region: cell attachment (R-G-D) motif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 107.5; DB 2;
Pred. No. 0.0022;
2; Mismatches 10;
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DVLTPIAPTVDVPDGRGDSLAYGLRSKSRSF
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64.5%;
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46.6%;
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Matches 27; Conservative
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                                                                                                                                                                                  A; Molecule type: protein A; Residues: 36-51 <SIN1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary
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                                                                                                                                                  A; Accession: A45132
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NyAlternate names: bone sialoprotein I; phosphoprotein I, secreted; tumor-secreted phosp
Syspecies Rattus norregicus (Norway rat)
C;Dete: 18-Dec-1987 #sequence revision 27-Jun-1994 #text change 09-Jul-2004
C;Accession: A25917; A45132; B45132; S28772; S04506; A45925
C;Accession: A25917; A45132; B45132; S28772; S04506; A45925
C;Accession: A25917; A45132; B45132; S28772; S04506; A45925
A;Oldberg, A.; Franzen, A.; Heinegard, D.
Proc. Natl. Acassion Sci. U.S.A. 83; 8819-8823, 1986
A;Title: Cloning and sequence analysis of rat bone sialoprotein (osteopontin) cDNA revea A;Reference number: A25917; MUID:87067405; PMID:3024151
A;Accession: A25917
A;Molecule type: mRNA
A;Residues: 1-317 collb>
A;Cross-references: UNIPROT:P08721; GB:M14656; NID:g2058859; PIDN:AAA41762.1; PID:g205860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Comment: This protein is involved in the initiation of the bone calcification process, ues, early resistance to bacterial infection and binding of tumor cells at secondary sit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Superfamily: osteopontin
;Superfamily: osteopontin
;Keywords: bone; cell binding; extracellular matrix; phosphoprotein; sialoglycoprotein
;Keywords: bone; cell binding; extracellular matrix; phosphoprotein; sialoglycoprotein
;Keywords: bone; cell binding; extracellular matrix; phosphoprotein; sacue #status predicted <MAT>
;17-294/Product: osteopontin #status predicted <MAT>
;185-96/Region: aspartic acid-rich
;144-146/Region: cell attachment (R-G-D) motif
                                                                                                                                           Title: Definition of a specific interaction between the early T lymphocyte activation; Reference number: A60931; MUID:90278349; PMID:2351930
                                                                                                                                                                                                              A;Accession: A60931
A;Molecule type: protein
A;Residues: 158-176 <SIN>
C;Comment: This protein is an acidic glycoprotein rich in aspartic acid, glutamic acid,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;Species: Rattus norvegicus (Norway rat)
;Date: 04-Feb-1998 #sequence_revision 13-Mar-1998 #text_change 07-May-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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C;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Species: 04-Feb-1998 #sequence_revision 13-Mar-1998 #text_change 07-May-195
C;Accession: UCS011
R;Lasa, M.; Chang, P.L.; Prince, C.W.; Pinna, L.A.
Biochem. Biophys. Res. Commun. 240, 602-605, 1997
A;Title: Phosphorylation of osteopontin by Golgi apparatus casein kinase.
A;Reference number: UCS811; MUID:98063283; PMID:9398611
A;Molecule type: protein
A;Molecule type: protein
A;Residues: 1-301 cLAS>
A;Experimental source: brain
C;Comment: This protein is involved in the initiation of the bone calcific
          A, Regidues: 1-42,'P',44-294 <PAT>
A, Rosidues: EMBL:X16151; NID:950863; PIDN:CAA34276.1; PID:950864
A, Cross-references: EMBL:X16151; NID:950863; PIDN:CAA34276.1; PID:950864
B, Singh, R.P.; Petarca, R.; Schwartz, J.; Singh, P.; Cantox, H.
J. Exp. Med. 171, 1931-1942.
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Pred. No. 0.00083;
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Pred. No. 0.00052;
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113 DVLTPIAPTVDVPDGRGDSLAYGLRSKSRSF 143
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C, Comment: This protein is an acidic glycop.
C, Goment: This protein is an acidic glycop.
C, Ganetics:
A, Gene: Eta-1
A, Map position: 5
A, Introns: 18/3; 30/3; 57/3; 71/3; 165/3
C, Superfamily: osteopontin extracellul.
F;1-16/Domain: signal sequence #status predi
F;1-294/Product: osteopontin #status predi
F;85-96/Region: aspartic acid-rich
F;144-146/Region: cell attachment (R-G-D) m
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64.5%;
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Best Local Similarity 62.5%;
Matches 20; Conservative
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Matches 20; Conservative
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Gaps

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Gaps

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A;Molecule type: DNA
A;Residues: 1-437 <HAY2
A;Cross-references: UNIPROT:Q8X5D0; GB:BA000007; PIDN:BAB35231.1; PID:g13361273; GSPDB:
A;Experimental source: strain O157:H7, substrain RIMD 0509952
C;Genetics:
A;Gene: ECs1808
C;Superfamily: phage lambda hypothetical protein 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Bscherichia coli

C;Date: 18-Uul-2001 #sequence_revision 18-Jul-2001 #text_change 09-Jul-2004

C;Accession: C90769

R;Haysshi, T:, Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.G

gasawara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori, M.; Shinagawa, H.

DNA Res. 8, 11-22, 2001

A;Title: Complete genome sequence of enterohemorrhagic Escherichia coli 0157:H7 and gen:

A;Reference number: A99629; MUID:21156231; PMID:11258796

A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              probable tail fiber protein [imported] - Escherichia coli (strain O157:H7, substrain RI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: DNA
A;Residues: 1-439 <HAY>
A;Cross-references: UNIPROT:Q8XEG4; GB:BA000007; PIDN:BAB34546.1; PID:g13360583; GSPDB:
A;Experimental source: strain O157:H7, substrain RIMD 0509952
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                                                                                                                                                                                                  Score 97; DB 2; Length 437; Pred. No. 0.028;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 29.1%; Score 97; DB 2; Length 439; Best Local Similarity 44.9%; Pred. No. 0.028; Matches 31; Conservative 5; Mismatches 25; Indels
                                                                                                                                                                                                                                                          25; Indels
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C;Superfamily: phage lambda hypothetical protein 401
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                                                                                                                                                                                                                                                       5; Mismatches
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A;Residues: 1-1464 <TOM>
A;Cross-references: UNIPROT:P08121; EMBL:X52046
                                                                                                                                                                                                    ch 29.1%;
il Similarity 44.9%;
31; Conservative
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                                                                                                                                                                                          Collagen 13, nonfibrillar - freshwater sponge (Ephydatia muelleri) (fragment)
Cispecies: Ephydatia muelleri
Cispecies: Ephydatia muelleri
Cispecies: Benydatia muelleri
Cispecies: Del Cispecies: Ephydatia muelleri
Cispecies: 19-Jun-1992 #sequence_revision 19-Jun-1992 #text_change 09-Jul-2004
Ciscosion: A41207
Riexposito, J.Y.; Le Guellec, D.; Lu, Q.; Garrone, R.
A; Exposito, J.Y.; Le Guellec, D.; Lu, Q.; Garrone, R.
A; Title: Short chain collagens in sponges are encoded by a family of closely related gen
A; Reference number: A41207, MUD: 92042105; PMID: 1939214
A; Status: preliminary
A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Reference number: Z21592
A;Accession: T35878
A;Accession: T35878
A;Accession: T35878
A;Accession: T35878
A;Accession: T35878
A;Accession: T35878
A;Residues: 1-1039
C;Lord Collis
A;Cross-references: UNIPROT:050516; EMBL:AL009204; PIDN:CAA15799.1; GSPDB:GN00070; SCOED A;Experimental source: strain A3(2)
C;Genetics: SCOEDB:SC9B10.09
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Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.G.
gasawara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori, M.; Shinagawa, H.
DNA Res. 8, 11-22, 2001
A;Title: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 and gend
A;Reference number: A99629; MUID:21156231; PMID:11258796
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C,Species: Streptomyces coelicolor
C,Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 09-Jul-2004
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                          -GPAGPAGPAGPAGP
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R;Oliver, K.; Harris, D.; Parkhill, J.; Barrell, B.G.; Rajandream, M.A.
submitted to the EMBL Data Library, November 1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 32.3%; Score 107.5; DB 2; Best Local Similarity 46.6%; Pred. No. 0.0025; Matches 27; Conservative 2; Mismatches 10;
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                       14 PTVDTYDG-RGDSVVYGRRSKSKKFRRPAGAAG
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A;Cross-references: UNIPROT:Q24893; GB:X56881 C;Genetics: A;Introns: 24/1; 75/1; 148/1; 217/1; 265/1
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A;Cross-references: GB:MI0627; NID:g180383; PIDN:AAA51992.1; PID:g553226
R;Wirtz, M.K.; Keene, D.R.; Hori, H.; Glanville, R.W.; Steinmann, B.; Rao, V.H.; Hollist
J. Biol. Chem. 265, 6312-6317, 1990
A;Title: In vivo and in vitro noncovalent association of excised alpha1(I) amino-termina
rome, type VI.
A;Reference number: A35233; MUID:90202908; PMID:2318855
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A; Residues: 33-52 <NIR>
A; Residues: 33-52 <NIR>
A; Rose: this propeptide fragment remained non-covalently bound to a defective, uncleaved the propeptide fragment remained mon-covalently bound to a defective, uncleaved the properties of a factor of a fact
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A; Residues: 156-183 <WEI>
A; Residues: 156-183 <WEI>
R; Click, E.M.; Bornstein, 1970
A; Title: Isolation and characterization of the cyanogen bromide peptides from the alphal
A; Reference number: A90567; MUID:71038625; PMID:5529814
A; Contents: CNBr0-1, CNBr2, CNBr4, CNBr5
A; Accession: B90567
A; Molecule type: protein
A; Molecule type: protein
A; Molecule type: 162-198, Z', 200-201, Z', 203-206, Z', 208-209, Z', 211-228, B', 230, BB', 233, Z', A; Molecule for 170-allysine
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A;Title: A critical crosslink region in human-bone-derived collagen type I. Specific cle. A;Reference number: S11372; MUID:90382436; PMID:2169412
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A;Molecule type: protein
A;Note: sequence of collagen alpha 1(S) (I) isolated from bone after pepsin digestion
B;Deak, S.B.; Scholz, P.M.; Amenta, P.S.; Constantinou, C.D.; Levi-Minzi, S.A.; Gonzalez,
T. Biol. Chem. 266, 21827-21832, 1991
A;Title: The substitution of arginine for glycine 85 of the alpha 1(I) procollagen chain
ooperative melting of intact type I collagen.
A;Reference number: 155342; MUID:92042092; PMID:1718984
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A)Residues: 258-268;1347-1357 < DEA>
A)Cross-references: GB:867495; NID:9239007; PIDN:AAB20350.1; PID:9239008
A)Kross-references from the 5' and 3' ends only are shown; mutant sequence 263-Arg report R;Morgan, P.H.; Jacobs, H.G.; Segrest, J.P.; Cunningham, L.W.
Biol. Chem. 245, 5042-5048, 1970
A;Title: Comparative study of glycopeptides derived from selected vertebrate collagens.
A;Reference number: A92069; MUID:71001508; PMID:4319110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-34 < BOR>
A; Cross-references: GB: J03559; NID: g180876; PIDN: AAA52052.1; PID: g553238
A; Cross-references: GB: J03559; NID: g180876; PIDN: AAA52052.1; PID: g553238
B; Chu, M.L.; de Wet, W.; Bernard, M.; Ramirez, F.
J. Biol. Chem. 260, 2315-2320, 1985
J7; Title: Fine Structural analysis of the human pro-alpha 1 (I) collagen gene. Promoter
A; Reference number: 155237; MUID: 85130970; PMID: 2857713
                                                                                                                                                                       A; Modecule type: DNA
A; Residues: 1-45 (ROS)
A; Residues: 1-45 (ROS)
A; Residues: 1-45 (ROS)
A; Cross-references: GGS-002829; NID:g180387; PIDN:AAA51993.1; PID:g180388
B; Bornstein, P.; McKay, J.; Morishima, J.K.; Devarayalu, S.; Gelinas, R.E.
Proc. Natl. Acad. Sci. U.S.A. 84, 8869-8873, 1987
A; Title: Regulatory elements in the first intron contribute to transcriptional control
A; Reference number: A39943; MUID:88097389; PMID:3480516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Status: translation not shown; translated from GB/EMBL/DDBJA;Molecule type: DNA
A;Residues: 1-34 <CH2>
                                                                                                                             shown; translated from GB/EMBL/DDBJ
     A; Reference number: I55254; MUID:88033098; PMID:2822714
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A;Status: translated from GB/EMBL/DDBJ
                                                                             A,Accession: I55254
A,Status: translation not
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Cologen alpha 1(I) chain precured - human

Cologen alpha 1(I) chain precured - human

Cologen alpha 1(I) chain precured - revision 04-Oct-1996 #text change 09-Jul-2004

Compete 12 - Laugla #sequence revision 04-Oct-1996 #text change 09-Jul-2004

Compete 12 - Resides A02822; 137347

Rep'Alcession: 160114; 801141, 7831315; 155254; A39943; 155237; A35233; 809400; B90567; 811

Sofo, A25439; 153466; A02822; 137377

Reformed 10 - Remard, M.; Pretorius, P.J.; de Wet, W.; Ramirez, F.; Pretorious, P.J.

Gene 67, 105-115, 1988

Ayritle: Complete nucleotide sequence of the region encompassing the first twenty-five encompassion: 160114

Ayritle: Complete nucleotide sequence of the region encompassing the first twenty-five encompassion: 160114

Ayritle: Structure of a full-length cDNA clone for the prepro-alpha-1(I) chain of human Axecsesion: 03143

Ayritle: Structure of a full-length cDNA clone for the prepro-alpha-1(I) chain of human Axecsesion: 801143

Ayritle: Structure of a full-length cDNA clone for the prepro-alpha-1(I) chain of human Axecsesion: 801143

Ayritle: Structure of a full-length cDNA clone for the prepro-alpha-1(I) chain of human Axecsesion: 801143

Ayritle: Structure of a full-length cDNA clone for the prepro-alpha-1(I) chain of human Axecsesion: 801143

Ayritle: Whan proalpha1(I) collagen gene structure reveals evolutionary conservation of Axecsesion: Annual proalpha1(I) collagen gene structure reveals evolutionary conservation of Axecsesion: Asia (1987)

Ayresides: 1-80, 237-340, 1984

Ayresides: 1-80, 20, 240, 1984
A; Molecule type: DNA
A; Residues: 1-866, G', E88-1464 <TOA>
A; Cross-references: EMBL:X52046; NID:9575321; PIDN:CAA36279.1; PID:9575322
R; Mctaseranta, M.; Toman, D.; de Crombrugghe, B.; Vuorio, E.
Biochim. Biophys: Acta 1089, 241-243, 1931
A; Title: Specific hybridization probes for mouse type I, II, III and IX collagen mRNAs.
A; Reference number: 316176; MUID:91274355; PMID:2054384
A; Reference number: 316176; MUID:91274355; PMID:2054384
A; Residues: 1442-1464 <MET>
A; Molecule type: DNA
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C; Genetics: 29/1; 95/3; 112/3; 150/3; 175/3; 193/3; 211/3; 229/3; 247/3; 265/3; 283/3; 28
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F; 1-24/Domain: signal sequence #status predicted <RIO>
F; 25-154/Domain: product: collagen alpha I(III) chain #status predicted <MAT>
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F; 128-1464/Product: collagen carboxyl-terminal homology <RIOC>
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26; Conservative
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Matches 26; Conserv
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A, Molecule type: mRNA
A, Rocession: A35336
A, Molecule type: mRNA
A, Reference unthors translated the codons CAG for 721 and CGT for 738 as Glu
A, Note: the authors translated the codons CAG for 721 and CGT for 738 as Glu
A, Note: the authors translated the codons CAG for 721 and CGT for 738 as Glu
A, Molecule type: 111) osteogenesis imperfecta due to glycine substitutions in the CA, Status: translated from GB/EMBL/DDBJ
A, Accession: 154365; MUID:95187161; PMID:7881420
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A, Accession: 154366
A, ARS sidues: 746-766, S', 768-781 < FOR>
A, Residues: 746-766, S', 768-781 < FOR>
A, Chessler, S.D.; Wallis, G.A.; Byers, P.H.
J. Biol. Chem. 268, 18218-18225, 1933
A, Fittle: Mutations in the carboxyl-terminal propeptide of the pro alpha 1(1) chain of ty A, Reference number: A47426; MUID:93352646; PMID:8349697
A, Accession: A47426
A, Molecule type: mRNA
A, Residues: 1179-1276, 'H', 1278-1336, 1339-1387, 'R', 1389-1464 < CHB>
A, Roselences: GB. S64596; MID:9407590
A, Note: sequence extracted from NCBI backbone (NCBIN:136444, NCBIP:136445)
A, Note: does not represent an experimentally determined sequence but three different mut
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A;Title: Multiexon deletion in an osteogenesis imperfecta variant with increased type II
A;Reference number: A22161; MUID:85104934; PMID:2981843
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A,Molecule type: DNA
A,Fesidues: 472-594, R7,596-607 < CH3>
A,Cross-references: GB:K03178; GB:K03179; NID:g179612; NID:g179613; PIDN:AAA51847.1; PID
A,Note: the authors translated the codon CGT for residue 595 as Pro
R,Mallis, G.A.; Starman, B.J.; Zinn, A.B.; Byers, P.H.
Am. J. Hum. Genet. 46, 1034-1040, 1990
A,Title: Variable expression of osteogenesis imperfecta in a nuclear family is explained
                                                                                                                                                                                                                                                                                          A;Accession: S15989
A;Aolecule type: mRNA
A;Residues: 281-302;403-420;B23-843;925-944;1026-1045;1143-1162 <LIAB>
B;Wirtz, M.K.; Rao, V.H.; Glanville, R.W.; Labhard, M.E.; Pretorius, P.J.; de Vries, W.N.
Connect. Tissue Res. 29, 1-11, 1993
A;Title: A cysteine for glycine substitution at position 175 in an alpha 1 (I) chain of A;Reference number: I52205; MUID:93339042; PMID:8339541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A. Status: 1.22.0.
A. Residues: translated from GB/EMBL/DDBJ
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A. A. Gross-references: GBS64717, ND:9408195; PIDN:AAB27677.1; PID:9408196
A. Note: mutant sequence from patient with osteogenesis imperfects
R. Bernard, M.P.; Chu, M.L.; Myers, J.C.; Ramirez, F.; Elkenberry, B.F.; Prockop, D.J.
B. A. Richemistry 22, 5213-5223, 1983
A. Title: Nucleotide sequences of complementary deoxyribonucleic acids for the proalphal A. Reference number: A90476; WUID:84080385; PMID:6689127
                                                                                                                                                                                                          the
                                                                                                                                                                                                               and telopeptide regions of
A. Experimental source: skin
A.Note: attachment of 2-O-alpha-D-glucosyl-O-beta-D-galactose to 5-hydroxylysine
R. Labhard, M. E.; Hollister, D.W.
Matrix 10, 124-130, 1990
A.Title: Segmental amplification of the entire helical and telopeptide regions of
A.Reference number: S15989; MUID:90326017; PMID:2374517
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A; Molecule type: mRNA
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1612378 Total number of hits satisfying chosen parameters:

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Maximum Match 100% Listing first 45 summaries UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Ouerv	Match	54.4	38.6	38.6	36.5	36.3	35.4	35.4	35.4	35.4	34.2	33.9	33.3	33.3	33.3	32.4	32.4	32.3	32.3	31.2	31.2	29.9	29.7	29.4	29.4	29.3	29.1	29.1	29.1	28.8	28.8	28.8
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PO8121 mus musculu Q7tt32 mus musculu		P02452 homo sapien	O7zti6 xenopus lae	044989 caenorhabdi	Q17459 caenorhabdi		Q801m5 xenopus lae		Q7ae98 escherichia	Q9eye8 escherichia
CA13 MOUSE Q7TT32	Q8BKY2 O8BLW4	CA11 HUMAN	07ZTI6	044989	017459	093485	Q801M5	Q910C0	Q7AE98	Q9EYE8
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1464	1464	1464	1486	283	294	809	1346	1449	361	437
28.8 28.8	28.8	28.7	28.7	28.5	28.5	28.4	28.4	28.4	28.2	28.2
96 96	96 96	95.5	95.5	95	95	94.5	94.5	94.5	94	94
33	3.4 3.5	36	38	39	40	41	42	43	44	45

ALIGNMENTS

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SEQUENCE FROM N.A. (ISOFORM A).
MEDILINE=95394452; PubMed=7665163.
Crosby A.H., Edwards S.J., Murray J.C., Dixon M.J.;
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Genomics 27:155-160(1995).
PRT; 314 AA.
P10451; Q15681; Q15682; Q15683; Q8NBK2; Q961Z1;
O1-MAR-1989 (Rel. 10, Created)
O1-MAR-1989 (Rel. 45, Last sequence update)
S5-OCT-2004 (Rel. 45, Last annotation update)
Osteopontin precursor (Bone sialoprotein 1) (Sep-1) (Urinary stone protein) (Nephropontin) (Nopontin).
Name=SPP1; Synonyms=OPN;
Phomo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. (ISOFORM A).

SEQUENCE FROM N.A. (ISOFORM A).

MEDLINE-92108068; PubMed=172912;

Shiraga H., Min W., VanDubeen W.J., Clayman M.D., Miner D.,

Terrell C.H., Sherbotie J.R., Foreman J.W., Przysiecki C.,

Neilson E.G., Hoyer J.R.;

"Inhibition of calcium oxalate crystal growth in vitro by uropontin:

another member of the aspartic acid-rich protein superfamily.";

Proc. Natl. Acad. Sci. U.S.A. 89:426-430(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Cloning and characterization of the human osteopontin gene and its
                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. (ISOFORM A).
MEDIINE=89263749; PubMed=2726470;
Kiefer M.C., Bauer D.M., Barr P.J.,
"The CDNA and derived amino acid sequence for human osteopontin.";
Nucleic Acids Res. 17:3306-3306(1989).
                                                                                                                                                                   Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. (ISOFORM B).
MEDLINE=90353945; PubMed=1974876;
Young M.F., Kerr J.M., Termine J.D., Wewer U.M., Wang M.G.,
MCBride O.W., Fisher L.W.;
"CDMA cloning, mRNA distribution and heterogeneity, chromosomal
location, and RFLP analysis of human osteopontin (OPN).";
Genomics 7:491-502(1990).
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Hijiya N., Setoguchi M., Matsuura K., Higuchi Y., Akizuki S.,
Yamamoto S.;
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SEQUENCE FROM N.A. (ISOFORM A).
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Biochem. J. 303:255-262(1994).
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TISSUEBRICE FROM N.A. (ISOFORMS A AND B).

TISSUEBRain, and Kidney;

XI SIDLINEE-2138825; PubMed=12477932; DOI=10.1073/pnas.242603899;

XI Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

X Strausberg R.D., Colling F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Jordan H., Moore T., Max J.L., Wang J., Heish F.,

Appleton M., Soares M.B., Bonaldo M.F., Casvant T.L., Scheetz T.E.,

Brownstein M.J., Usdin T.B., Toohhyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Brownstein M.J., Usdin T.B., Toohhyuki S., Carninci P., Prange C.,

Raba S.S., McEwan P.J., McKernan R.J., Malk J.A., Gunarathe P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Nhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Rachiguez A.C., Grimwood J., Schmutz J., Myers R.M.,

Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Rodriguez A.C., Grimwood J., Schmutz J., Marra M.A.;

"Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                       Crissure-Placenta;

RESURE-Placenta;

RESURE-Placenta;

RESURE-Placenta;

RA OTA T., SULXHI Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R.,

RA OTA T., SULXHI Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R.,

RA OTA T., SULXHI Y., Salto M., Mishi T., Shibahara T., Tanaka T., Ishii S.,

RA Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S.,

RA Yamamoto J. T., Salto M., Yawai Y., Isono Y., Nakamura Y.,

RA Naranati K., Murakami K., Yasuda T., Isono H.,

RA Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H.,

RA Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H.,

RA Shiratori A., Sudo H., Hosoiri T., Yawanagi T., Murakawa K.,

RA Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K.,

RA Yamazaki M., Ninomiya R., Komai F., Hara R., Takeuchi M., Hotuta Y.,

RA Ishida S., Ono Y., Takahashi Pujii A., Hara H., Tanase T.-O.,

RA Nomura Y., Togiya S., Komai F., Hara R., Takeuchi K., Arita M.,

Nomura Y., Togiya S., Komai F., Hara R., Takeuchi K., Arita M.,

Nomura Y., Togiya S., Komai F., Hara R., Takeuchi W., Sano S.,

Nomiyama H., Satoh N., Takami S., Terashima Y., Suzuki O.,

RA Nakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H.,

RA Hishigaki H., Watanabe K., Kumagai A., Itakura S., Fujiwara T.,

RA Hishigaki H., Watanabe K., Kumagai A., Itakura S., Fujuana T.,

RA Nakagawa S., Senoh A., Mizoguchi H., Takemoto M., Kawakami B.,

RA Nakagawa S., Senoh Y., Sujii Y., Ozaki K., Hirao M., Ohmori Y.,

RA Nakagahi T., Oyama M., Hata H., Watanabe M., Komateu T.,

Matushima-Sugano J., Satoh T., Shirai Y., Nakagawa K.,

RA Nakai K., Nakajima Y., Mituno T., Morinaga M., Sasaki M.,

RA Nakai K., Nada Jima Y., Mituno T., Morinaga M., Sasaki M.,

RA Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sadao S.,

RA Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sadon S.,

RA Nakai K., Yada T., Nakaima Y., Ohara O., Isogai T., Sadon S.,

RA Nakai K., Yada T., Nakai A., Ohara O., Isogai T., Sadul T., Ohana D., Satoh T., Ohana D., Satoh T., Ohana D
[6] SEQUENCE FROM N.A. (ISOFORMS A; B AND C).
SEQUENCE FROM N.A. (ISOFORMS A; B AND C).
SEDIANE-95139605; PubMed=7837791;
Saltoh Y., Kuratsu J., Takeshima H., Yamamoto S., Ushio Y.;
"Expression of osteopontin in human glioma. Its correlation with the
                                                                                                                                                                                                                                                                                    Yu W., Sarginson J., Gibbs R.A.;
Submitted (MAR-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. (ISOFORM D).
                                                                                                                                                                                                                               SEQUENCE FROM N.A. (ISOFORM B).
                                                                                                                                                                     Lab. Invest. 72:55-63(1995).
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                                                                                                                                                                                                                                                          TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and mouse
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[10] SEQUENCE OF 67-278 FROM N.A.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MIM; 166490; -
GO; GO:0005512; F: extracellular matrix; TAS.
GO; GO:0005125; F: eytokine activity; ISS.
GO; GO:0005125; F: growth factor activity; TAS.
GO; GO:0005125; F: growth factor activity; TAS.
GO; GO:0005178; F: integrin binding; NAS.
GO; GO:0007267; P: enti-apoptosis; ISS.
GO; GO:0007267; P: enti-apoptosis; ISS.
GO; GO:0007267; P: enti-apoptosis; ISS.
GO; GO:0005030; P: enti-apoptosis; IAS.
GO; GO:0005030; P: induction of positive chemotaxis; TAS.
GO; GO:0005030; P: negative regulation of bone mineralization; NAS.
GO; GO:0001503; P: positive regulation of T-cell proliferation; TAS.
GO; GO:0045102; P: positive regulation of myeloid blood cell differenti. . .; TAS.
GO; GO:0042088; P: T-helper I type immune response; TAS.
                                                                                                                            MEDLINE=92246977, PubMed=1575754;

Kohri K., Suzuki Y., Yoshida K., Yamamoto K., Amasaki N., Yamate T Kohri K., Suzuki Y., Yoshida K., Yamamoto K., Amasaki N., Yamate T Kohri K., Indequal T., Iguchi M., Sinohara H., Kurita T.; Turinary stone protein, which is identical to osteopontin.";

Biochem, Biophys. Res. Commun. 184.859-864(1992).

-i. FUNCTION: Binds tightly to hydroxyapatite. Appears to form an integral part of the mineralized matrix. Probably important to
                                                                                                                                                                                                                                                                                                                                                                                                              PTM: Extensively phosphorylated on serine residues.
PTM: N- and O-glycosylated.
DISEASE: This protein plays a principal role in urinary stone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -!- SIMILARITY: Belongs to the osteopontin family.
                                                                                                                                                                                                                                                                    Event=Alternative splicing; Named isoforms=4;
Name=A; Synonyms=OPN-a, OP1B;
IsoId=Pl0451-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                   Name=B; Synonyms=OPN-b, OP1A;
IsoId=P10451-2; Sequence=VSP_003778;
                                                                                                                                                                                                                                                                                                                                                    Name=C; Synonyms=OPN-c;
IsoId=P10451-3; Sequence=VSP_003777;
                                                                                                                                                                                                                                                                                                                                                                                                    lsoId=P10451-4; Sequence=VSP_011639;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              formation as the stone matrix
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EMBL, J04765; AAA59974.1; --
EMBL, U20765; AAA1765.1; --
EMBL, U20765; AAA86886.1; --
EMBL, D14813; BAA03554.1; --
EMBL, D28769; BAA05590.1; --
EMBL, D28761; BAA05950.1; --
EMBL, AF052124; AAC28619.1; --
EMBL, AC07543; BAC1635.1; --
EMBL, BC007016; AAH7387.1; --
EMBL, BC022844; AAH22844.1; --
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Knoll A., Stratil A., Cepica S., Dvorak J.;
Knoll A., Stratil A., Cepica S., Dvorak J.;
Knoll A., Stratil A., Cepica S., Dvorak J.;
Gene is caused by the presence or absence of a SINE (PRE-1) element.";
Anim. Genet. 30.466-466(1999).
EMBL; AJ234667; CAB61259.1; -.
GO; GO:0001155; P:cell adhesion; IEA.
GO; GO:0001155; P:cell adhesion; IEA.
HIMESTO; IPRO02038; Osteopontin.
Pfam; PF00865; Osteopontin.
PRINTS; PRO0216; OSTEOPONTIN.
                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OSTP_PIG STANDARD; PRT; 303 AA.
P14287;
01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
OSteopontin precursor (Bone sialoprotein 1) (Secreted phosphoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                          Chordata, Craniata, Vertebrata, Buteleostomi,
Cetartiodactyla; Suina; Suidae; Sus.
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Mammalia, Butheria, Cetartiodactyla, Suina, Suidae, Sus
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Pred. No. 4e-10;
0; Mismatches 1; Indels
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Last annotation update)
                                                                                                                                                             142 ATEVFTPVVPTVDTYDGRGDSVVYGLRSKSKKFRRP 177
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                                                                                                                                 5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRRP 40
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Pfam; PF00865; Osteopontin; 1. PRINTS; PR00216; OSTEOPONTIN.
                                                                                                                                                                                                                                                                                                      (TrEMBLrel. 13, C
(TrEMBLrel. 13, L
(TrEMBLrel. 24, L
                                                         54.4%;
                                                   Query Match
Best Local Similarity 97.2
Matches 35, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1) (SPP-1).
Name=SPP1; Synonyms=OPN;
Sus scrofa (Pig).
                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                              01-JUN-2003 (TrEMBLrel. Osteopontin (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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01-MAY-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The Shang Q., Domenicucci C., Goldberg H.A., Wrana J.L., Sodek J.;

"Characterization of fetal porcine bone sialoproteins, secreted
phosphoprotein (SPPI, osteopontin), bone sialoprotein, and a 23-kDa
phosphoprotein. Demonstration that the 23-kDa glycoprotein is derived
if glycoprotein. Demonstration that the 23-kDa glycoprotein is derived
if from the carboxyl terminus of SPPI.";
J. Biol. Chem. 265:7583-7589(1990).

"Integral part of the mineralized matrix. Probably important to
cell-matrix interaction.

"C-1- FUNCTION: Acts as a cytokine involved in enhancing production of
interferon-gamma and interleukin-12 and reducing production of
interfeukin-10 and is essential in the pathway that leads to type
I immunity (By similarity).

"SUBCELULAR LOCATION: Secreted.

"PTM: Extensively phosphared on serine residues.

"I PTM: Extensively phosphared.

"I SIMILARITY: Belongs to the osteopontin family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GO:0005578; C:extracellular matrix; ISS.
GO:0005125; F:cytokine activity; ISS.
GO:0005128; F:growth factor activity; ISS.
GO:0005178; F:growth factor activity; ISS.
GO:0005178; F:anti-apoptoals; ISS.
GO:0007267; P:cell-cell signaling; ISS.
GO:0007267; P:cell-cell cignaling; ISS.
GO:0007569; P:immune cell chemotaxis; ISS.
GO:0030592; P:immune cell chemotaxis; ISS.
GO:0030502; P:immune cell chemotaxis; ISS.
GO:0042102; P:positive regulation of bone mineralization; ISS.
GO:0042102; P:positive regulation of T-cell proliferation; ISS.
GO:0042103; P:regulation of myeloid blood cell differenti. .; ISS.
GO:0042088; P:T-helper I type immune response; ISS.
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SEQUENCE OF 1-18 FROM N.A.
SEQUENCE OF 1-18 FROM N.A.
MEDLINE-32339454; PubMed=1633816;
Zhang Q., Wrana J.L., Sodek J.;
"Characterization of the promoter region of the porcine opn (osteopontin, secreted phosphoprotein 1) gene. Identification of positive and negative regulatory elements and a 'silent' second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (Potential)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Osteopontin.
Cell attachment site.
N-linked (GlCNAc. . .) (Pc
; 87D6240E34013EF7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Direct p
Signal.
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Biomineralization; Cell adhesion; Cytokine; Glycoprotein; Phosphorylation: Sialic acid; SIGNAL 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Mismatches
                                                                                                                                                                                                                                                                                                                                Eur. J. Biochem. 207:649-659(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=90237064; PubMed=2332443;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GO; GO:0042088; P:T-helper 1 type
InterPro: PR002038; Osteopontin.
Pfam; PF00865; Osteopontin; I.
PRINTS; PR00216; OSTEOPONTIN.
                                                                                                                                                                                                                                                                                                                                                                                                                OF 17-36 AND 172-211.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  303 AA; 33668 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; X16575; CAA34594.1; -. EMBL; M84121; AAA31094.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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SITE
CARBOHYD
SEQUENCE
  CONFLICT
                                  Query Match
                                                                                                                                                                   09XSX9;
                                                       Matches
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                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the buropean Bloinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                            -I- FUNCTION: Acts as a cryokine involved in enhancing production of interferon-gamma and interleukin-12 and reducing production of interleukin-10 and is essential in the pathway that leads to type I immunity (By similarity).
-I- SUBUNIT: Ligand for integrin alpha-V/beta-3.
-I- SUBCELIULAR LOCATION: Secreted.
-I- PTM: Extensively phosphorylated on serine residues.
-I- PTM: N- and 0-glycosylated.
-I- SIMILARITY: Belongs to the osteopontin family.
                                                                                   01-077; P46631,
01-07L-1993 (Rel. 26, Created)
01-07L-1993 (Rel. 26, Last sequence update)
25-0CT-2004 (Rel. 45, Last annotation update)
0steopontin precursor (Bone sialoprotein 1) (Secreted phosphoprotein 1) (SPP-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     By similarity.
Osteopontin.
Call attachment site.
N-linked (GIGNAc. .) (Potential).
M -> V (in Ref. 2).
E -> ESDE (in Ref. 2).
                                                                                                                                                                 Oryctolagus cuniculus (Rabbit).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Lagomorpha, Leporidae, Oryctolagus.
                                                                                                                                                                                                                                TISSUE=Osteoclast,
MEDLINE=92360044; PubMed=1379809;
Tezuka K.-I., Sato T., Kamioka H., Nijweide P.J., Tanaka K.,
Tezuka K.-I., Sato T., Kamioka H., Nijweide P.J., Tanaka K.,
Matsuo T., Ohta M., Kuthara N., Hakeda Y., Kumegawa M.;
"Identification of osteopontin in isolated rabbit osteoclasts.";
Biochem. Biophys. Res. Commun. 186:911-917(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PERMY, PF00865, Osteopontin, 1.
PRINTS, PR00216, OSTEOPONTIN.
SMART; SM0017; OSTEOPONTIN.
PROSITE; PS00884; OSTEOPONTIN; 1.
Biomineralization; Cell adhesion; Cytokine; Glycoprotein;
Phosphorylation; Sialic acid; Signal.
               5 ATEVFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRR
                                                                              311 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PIR; JC1191; JC1191.
InterPro; IPR002038; Osteopontin.
                                                                                                                                                                                                                                                                                                                                                                                                               cell-matrix interaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; D11411; BAA01993.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      D16544; BAA03980.1; -.
                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 311
157
103
85
100
                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                  NCBI_TaxID=9986;
                                                                                                                                                                                                                                                                                                                          TISSUE=Myeloid;
PubMed=7717985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             155
103
85
100
128
                                                                              RABIT
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CONFLICT
CONFLICT
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RABIT
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its was by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ibselb.ch).
                                                                                                                                                           1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=99423513; PubMed=10491620;
Johnson G.A., Spencer T.E., Burghardt R.C., Bazer F.W.;
Johnson G.A., Spencer T.E., Burghardt R.C., Bazer F.W.;
"Ovine osteopontin: I. Cloning and expression of messenger ribonucleic acid in the uterus during the periimplantation period.";
Biol. Reprod. 61:884-891(1999).
-!- FUNCTION: Binds tightly to hydroxyapatite. Appears to form an integral part of the mineralized matrix. Probably important to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cell-matrix interaction.
-!- FUNCTION: Acts as a cytckine involved in enhancing production of interferon-gamma and interleukin-12 and reducing production of interleukin-10 and is essential in the pathway that leads to type I immunity (By similarity).
-!- SUBUNIT: Ligand for integrin alpha-v/beta-3.
-!- SUBCELLULAR LOCATION: Secreted.
-!- PTM: Extensively phosphorylated on serine residues (By
                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-OCT-2001 (Rel. 40, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
Osteopontin precursor (Bone sialoprotein 1) (Secreted phosphoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Cetartiodactyla, Ruminantia, Pecora, Bovidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ) (Potential)
                                                                                                                                                           ij
                                                                                         Score 121.5; DB 1; Length 311; Pred. No. 0.00033;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMART; SMUDUL; COLLO. OSTEOPONTIN; 1.
BROSITE; PS00884; OSTEOPONTIN; 1.
Blomineralization; Cell adheeion; Cytokine; Glycoprotein;
Phosphorylation; Sialic acid; Signal.
Phosphorylation; Sialic acid; Signal.
By Similarity.
                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Osteopontin.
Cell attachment site.
N-linked (GlCNAc. . .) (Pc
37D49ElDDIFBFD47 CRC64;
T -> I (in Ref. 2).
692750F63B7CB5AS CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- PTM: N- and O-glycosylated (By similarity).
                                                                                                                                                                                                                                                                  138 ATTVFTEVVPTVETYDGRGDSVAYRLKRSKSKMF 171
                                                                                                                                                                                                                       5 ATEVFTPVVPTVDTYDGRGDSVVYG-RRSKSKKF 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                 278 AA
                                                                                                                                                        2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GO; GO:0005125; F:cytckine activity; ISS. Interpro; IPR002038; Osteopontin. Pfam; PF00865; Osteopontin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; AF152416; AAD38388.1; -.
GO; GO:0005576; C:extracellular; ISS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (Rel. 40, Created)
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Μ
                          35172 MW;
                                                                                      36.5%;
76.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31052
                                                                                                                                                        26; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Name=SPP1; Synonyms=OPN;
Ovis aries (Sheep).
                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
151 1
311 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        278 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=Endometrium;
                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9940;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1) (SPP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                              SHEEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Caprinae;
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MEDLINE=93308294; PubMed=8320368;
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                                           Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; M66236; AAA30462.1; -.
         P31096; Q8SPS6;
01-JUL-1993 (Rel. 26,
01-JUL-1993 (Rel. 26,
25-OCT-2004 (Rel. 45,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PubMed=8663267;
                                                                                                                                                                                                                                                                                                       Bovinae; Bos
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                                                                                                                                                         (SPP-1).
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KETAIN-MIX FUB/N: TISSUE=Mammary tumor;

KETAIN-MIX FUB/N: TEINGOID E. M., Grouse L.H., Derge J. G.,

STRAIN-MIX FUB., Colling F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Altechul S.F., Zeeberg B., Butcow K.H., Schaefer C.F., Bhat N.K.,

RA Altechul S.F., Zeeberg B., Butcow K.H., Schaefer C.F., Bhat N.K.,

RA Diatchenko L., Marusina K.P., Parmer A.A., Rubin G.M., Hong L.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Brownstein M.J., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

Rahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Rakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Ratkesley R.W., Marra M.D., Schmutz J., Myers R.M., Butterfield Y.S.,

Raywinski M.I., Skalska U., Smallus D.E., Schnerch A., Schein J.E.,

M. Ornershing M.A., Marra M.D., Smallus D.E., Schnerch A., Schein J.E.,

M. Ornershing M.A., Marra M.D., Smallus D.E., Schnerch A., Schein J.E.,
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                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
Score 121; DB 1; Length 278;
Pred. No. 0.00033;
1; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 213;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=Mix FVB/N; TISSUE=Mammary tumor;
Strausberg R.;
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   213 AA; 23625 MW; 50CCESDDE9E91797 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                 01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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                                                                                                                                                   138 VFTPPFPTESTNDGRGDSVAYGLKSKSKKFRR 169
                                                                                                                    8 VFTPVVPTVDTYDGRGDSVVYGRRSKSKKFRR 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    213 ÀA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; BC014284; AAH14284.1; -...
MGD; MGI:2442117; Pogz.
GO; GO:0007155; P:cell adhesion; IEA.
GO; GO:0001503; P:ossification; IEA.
                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hypothetical protein (Fragment).
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   36.3%;
75.0%;
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                           Best Local Similarity 75.0
Matches 24; Conservative
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                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (Mouse)
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Matches 21; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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OSTP_BOVIN
ID OSTP_BOVIN
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Query Match
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                                                                                                                                                                                                                                                                                                                             091VH4
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278 AA.

PRT;

STANDARD;

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This SWISS-FROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=96117654; PubMed=8535240;
Soerensen E.S., Hoejrup P., Petersen T.E.;
"Posttranelational modifications of bovine osteopontin: identification
of twenty-eight phosphorylation and three O-glycosylation sites.";
Protein Sci. 4:2040-2049(195).
-!- FUNCTION: Binds tightly to hydroxyapatite. Appears to form an
integral part of the mineralized matrix. Probably important to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Soerensen E.S., Petersen T.E.; "Purification and characterization of three proteins isolated from the proteose peptone fraction of bovine milk."; Unity Res. 60:189-197(193).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Salih E., Zhou H.-Y., Glimcher M.J.;
Phosphorylation of purified bovine bone sialoprotein and osteopontin
by protein kinases.".
J. Biol. Chem. 271:16897-16905(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cell-matrix interaction.
FUNCTION: Acts as a cytokine involved in enhancing production of interferon-gamma and interleukin-12 and reducing production of interleukin-10 and is essential in the pathway that leads to type
                                   01-JUL-1993 (Rel. 26, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
Osteopontin precursor (Bone sialoprotein 1) (Secreted phosphoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- TISSUE SPECIFICITY: Bone, inner ear, kidney, uterus, lung, brain,
                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE=92084141; PubMed=1721033; DOI=10.1016/0378-1119(91)90439-1;
Kerr J.M.; Fisher L.W., Termine J.D., Young M.F.;
"The cDNA cloning and RNA distribution of bovine osteopontin.";
Gene 108:237-243(1991).
                                                                                                             Name-SPP1; Synonyms-OPN;
Bos taurus (Bovine).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=Korean; TISSUB=Kidney;
Lee TY., Ju S.K., Nam M.S.;
"Cloning of exteopontin (OPN) in Korean native cattle.";
Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -!- SiMILARITY: Belongs to the osteopontin family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    I immunity (By similarity).
SUBUNIT: Ligand for integrin alpha-V/beta-3.
SUBCELLUIAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 17-22; 44-54; 168-182 AND 221-243.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      [4] SEQUENCE OF 17-28, AND PHOSPHORYLATION.
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us-09-981-845-11.rup

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Mol. Immunol. 32:447-448(1995)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=10090;
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   ST REAL PRESENTATION OF THE PRESENTATION OF TH
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                        PRINTS; PR00216; OSTEOPONTIN.
SMART; SM00017; OSTEO; 1.
PROSTTE; PS00884; OSTEOPONTIN; 1.
Biomineralization; Call adhesion; Cytokine; Direct protein sequencing; Glycoprotein; Phosphorylation; Sialic acid; Signal.
SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10095;
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01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-UUN-2003 (TrEMBLrel. 24, Last annotation update)
Early T-lymphocyte activator. (Fragment).
                                                                                                                                                                                                     Osteopontin.
Cell attachment site.
Phosphoserine.
Phosphoserine.
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Pred. No. 0.00066;
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0-linked.
0-linked.
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1 - X (in Ref. 4).
1 - Y (in Ref. 2).
T - A (in Ref. 2).
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Phosphoserine.
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Pfam; PF00865; Osteopontin; 1.
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Matches 22; Conservative
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278 AA;
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CONFLICT
SEQUENCE
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MOD_RES
CARBOHYD
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SCHOLDENE, FOON N.A.

SECURATE-MIX FVON N.A.

SCHULDENE STRAIN-MIX TISSUE-Mammary tumor;

MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RETAUSPERG R.L., Felingold E.A., Grouse L.H., Derge J.G.,

RIAUSPER R.D., Collins F.S., Magner L., Shenmen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

B Diatchenko L., Marusina K., Parmer A.A., Rubin G.M., Hong L.,

Raba S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.M.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.M.,

A Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.M.,

Raha S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.M.,

Raheseley R.W., Touchman J.W., Madan A., Rodrigues S., Sanchez A.,

Rhiting M., Touchman J.W., Gareen E.D., Dickson M.C.,

Rationez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Rrywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

Ray Jones S.J., Marra M.A.,

Reperation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hypothetical protein.
Was musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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STRAIN=Mix FVB/N; TISSUE=Mammary tumor;
Director MGC Project;
Submitted (40G-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; BC002113; AAH02113.1; -.
EMBL; BC060720; AAH80720.1; -.
EMBL; BC06005615; C:extracellular space; TAS.
InterPro; IFR002038; Osteopontin.
PF00865; Osteopontin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (JAN-2001) to the EMBL/GenBank/DDBJ databases
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Last sequence update)
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Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                      Score 118; DB 2; I
Pred. No. 0.00067;
5; Mismatches 6;
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                      MGD; MGI:98389; Sppl.
GO; GO:000155; P:cell adhesion; IEA.
GO; GO:0001503; P:ceshication; IEA.
InterPro; IPR002038; Osteopontin.
Pfam; PR00865; Osteopontin; 1.
PRINTS; PR00216; OSTEOPONTIN.
SWART; SMO017; OSTEO; 1.
PROSITE; PS00884; OSTEOPONTIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                         Match 35.4%;
Local Similarity 65.6%;
EMBL; S78177; AAB34351.2; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-JUL-2004 (TrEMBLrel. 27, 05-JUL-2004 (TrEMBLrel. 27, 25-OCT-2004 (TrEMBLrel. 28, Hypotherical reserved)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
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Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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[5]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mouse epidermis."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE=Kidney;
                                                                                                                                                                                                                                                                                                                                  Yamamoto S
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                                                                  SEQUENCE
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STRAIN-0157.HI7 ( RIMD 0509952 / EHEC;
MEDLINE=21156231; PubMed=11258796;
MEDLINE=21156231; PubMed=11258796;
MARINO K., Ohnishi M., Kurokawa K., Ishii K., Yokoyama K., Hayashi T., Makino K., Ohnishi M., Kurokawa C., Ogasawara N., Tobe T., Inda T., Takami H., Honda T., Sasakawa C., Ogasawara N., Yasunaga T., Inda T., Takami H., Honda T., Sasakawa C., Ogasawara N., Yasunaga T., Mara S., Shiba T., Hattori M., Shinagawa H.;
Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 and genomic comparison with a laboratory strain K-12.";
EMBL; APO05557; BAB35654.1; -.

REML; G90907; G90907.
G0; G0:0005737; C:cytoplasm; IEA.

RG; G0:000617; Piphosphate transport; IEA.
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OSTP MOUSE STANDARD; PRT; 294 AA.

D1-071-1989 (Rel. 11, Created)
01-071-1989 (Rel. 11, Last sequence update)
25-0CT-2004 (Rel. 45, Last annotation update)
05-0CT-2004 (Rel. 45, Last annotation 1) (Secreted phosphoprotein 1) (SPP-1) (Winopontin) (Early T lymphocyte activation 1 protein)
13 (SPP-1) (Winopontin) (Early T lymphocyte activation 1 protein)
14 (SPP-1) (Winopontin) (SPP-1, Op, Spp-1;
15 Was musculus (Mouse).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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8
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0
                                                                                                                                  Length 295;
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                                                                                                                                                                           Indels
                    SMART; SM00017; OSTEO; 1.
PROSITE; PS00884; OSTEOPONTIN; 1.
Hypothetical protein.
SEQUENCE 295 AA; 32652 MW; B06998BF87CF9A68 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam, PF01391; Collagen; 1.
Pfam, PF06820; Phage_fiber_C; 1.
SEQUENCE 407 AA; 41291 MM; D2F6C5E6ABEEC3EB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Last sequence update)
Last annotation update)
                                                                                                                           Score 118; DB 2; L
Pred. No. 0.0007;
5; Mismatches 6;
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                                                                                                                                                                                                                                                                                                                                                                           407 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                    Created)
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NCBI_TaxID=83334;
PRINTS; PR00216; OSTEOPONTIN.
                                                                                                                                35.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OrderedLocusNames=ECs2231;
Escherichia coli 0157:H7.
                                                                                                                         Query Match 35.49
Best Local Similarity 65.6°
Matches 21, Conservative
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STRAIN-MRI; TISSUE-Mammary gland;

XX STRAIN-MRI; TISSUE-Mammary gland;

XX MEDINE=2238825; PubMed=12477932; DOI=10.1073/pnas.242603899;

XX Tausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

XX Altachul S.P., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.P., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Diatchenko L., Marusha K., Farmer A.A., Rubin G.M., Hong L.,

XX Brownstein M.J. Usdin T.B., Toshiyuki S.I., Wang J., Hong L.,

XX Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

XX Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

XX Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

XX Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

XX Hilalon D.K., Muzny D.M., Sodergen B.J., Lu X., Gibbs R.A.,

XX Richards S., Worley W.C., Shevchenko Y., Bouffard G.G.,

XX Richards A., Young A.C., Shevchenko Y., Bouffard G.G.,

Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,

XX Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

XX Butterfield X.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

XX Butterfield A.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

XX Butterfield A., Schein J.E., Jones B.J.M., Marra M.A.;

XX Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
MEDIJNE-89255479; PubMed=2722855;
Craig A.M., Smith J.H., Denhardt D.T.;
"Osteopontin, a transformation-associated cell adhesion
phosphoprotein, is induced by 12-O-tetradecanoylphorbol 13-acetate in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.

MEDIINE=89310352; PubMed=2787378;

Patarca R., Freeman G.J., Singh R.P., Wei F.-Y., Durfee T.,

Blattner F., Regnier D.C., Kozak C.A., Mock B.A., Morse H.C. III,

Jerrells T.R., Cantor H.;

"Structural and functional studies of the early T lymphocyte

activation 1 (Eta-1) gene. Definition of a novel T cell-dependent
response associated with genetic resistance to bacterial infection.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Nucleotide sequence of cDNA for mouse osteopontin-like protein.";
                                                                                                 Miyazaki Y., Setoguchi M., Yoshida S.Y., Akizuki S., Yamamoto S., The mouse osteopontin gene. Expression in monocytic lineages and complete nucleotide sequence.", U. Biol. Chem. 265:14432-14438 [1990].
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Worcester E.M., Blumenthal S.S., Beshensky A.M., Lewand D.L.;
Worcester E.M., Blumenthal S.S., Beshensky A.M., Lewand D.L.;
"The calcium oxalate crystal growth inhibitor protein produced by
mouse kidney cortical cells in culture is osteopontin.";
J. Bone Miner. Res. 7:1029-1036(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Miyazaki Y., Setoguchi M., Yoshida S., Higuchi Y., Akizuki S.,
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STRAIN=BALB/c; TISSUE=Liver;
MEDLINE=90354433; PubMed=2387863;
                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Macrophage;
MEDLINE=89263742; PubMed=2726465;
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TISSUE=Kidney;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (SPP-1).
                                                                                                                                                                                                                                                                                                                                    SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OSTP RAT
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                                                                                                                                                                                                                                                                                                                                                        R EMBL; X16151; CAA342765.1;

R EMBL; X16151; CAA342765.1;

R EMBL; BC057868; AAH57858.1; -.

R PIR; A37818; AA37818.

MGD; MG1:98389; Sppl.

R GO; GO:0005178; F:cytchine activity; ISS.

GO; GO:0005178; F:integrin binding; ISS.

R GO; GO:0005039; P:immune cell chemotaxis; ISS.

R GO; GO:0005039; P:immune cell chemotaxis; ISS.

R GO; GO:0030502; P:ingative regulation of bone mineralization; ISS.

R GO; GO:0045037; P:regulation of myeloid blood cell differenti. . .; ISS.

R GO; GO:0045037; P:regulation of myeloid blood cell differenti. . .; ISS.

R GO; GO:0042088; P:T-helper I type immune response; ISS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITÉ, PS00884, OSTEOPONTIN, 1.
Biomineralization, Cell adhesion, Cytokine, Direct protein sequencing,
Glycoprotein, Phosphorylation, Sialic acid, Signal.
                                                                                    -!- FUNCTION: Acts as a cytokine involved in enhancing production of interferon-gamma and interleukin-12 and reducing production of interleukin-10 and is essential in the pathway that leads to type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
          (osteopontin): an early component of type-1 (cell-mediated)
                                              -!- FUNCTION: Binds tightly to hydroxyapatite. Appears to form an integral part of the mineralized matrix. Probably important to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Osteopontin.
Cell attachment site.
N-linked (GlCNAc. . .) (Potential).
L -> P (in Ref. 4).
E -> G (in Ref. 3).
V -> F (in Ref. 3).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
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                                                                                                                                      -!- SUBUNIT: Ligand for integrin alpha-V/beta-3.
-!- SUBCELLULAR LOCATION: Secreted.
-!- PTM: Extensively phosphorylated on serine residues.
-!- PTM: N- and O-glycosylated.
-!- PTM: N- and O-glycosylated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9D5F32D67ABC53EA CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         165 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 113;
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05-JUL-2004 (TrEMBLrel. 27, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam; PF00865; Osteopontin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        32459 MW;
                                                                                                                                                                                                                                                                                                                                EMBL; X13986; CAA32165.1; -. EMBL; J04806; AAA57265.1; -.
                                                                                                                                                                                                                                                                                                                         EMBL; X51834; CAA36132.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 33.9%;
Best Local Similarity 62.5%;
Matches 20; Conservative
                                                                           cell-matrix interaction.
                                  Science 287:860-864 (2000)
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122
294 AA;
                                                                                                                               immunity
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CONFLICT
SEQUENCE
                        immunity.
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Q6N617
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SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

C. STRAIN-GA0009 / ATCC BAA-98;

PubMed=14704707; DOI=10.1038/nbt923;

PubMed=14704707; DOI=10.1038/nbt923;

Larimer F. W., Chain P., Hauser L., Lamerdin J.E., Malfatti S., Do L.,

Land M.L., Pelletier D.A., Beatty J.T., Lang A.S., Tabita F.R.,

Gibson J.L., Hanson T.E., Bobst C., Torres y Torres J.L., Peres C.,

A Harrison F. H., Gibson J., Hawood C.S.,

T. Complete genome sequence of the metabolically versatile
photosynthetic bacterium Rhodopseudomonas palustris.";

Nat. Biotechnol. 22:55-61(2004).

R BMBL; BX572602; CAE28243.1; -4

RGO, GO:0005137; Piphosphate transport; IEA.

RGO, GO:0006817; Piphosphate transport; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Singh K., Mukherjee A.B., de Vouge M.W., Mukherjee B.B.; n'in fiferential processing of osteopontin transcripts in rat kidney-and osteoblast-derived cell lines.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oldberg A., Franzen A., Heinegaard D.; "Cloning and sequence analysis of rat bone sialoprotein (osteopontin)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-JUL-2004 (Rel. 44, Last annotation update)
Osteopontin precursor (Bone sialoprotein 1) (Secreted phosphoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Schwartz S.M.; "Osteopontin is elevated during neointima formation in rat arteries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-Sprague-Dawley, TISSUE-Smooth muscle;
MEDLINE-94013467; PubMed-8408622;
Giachelli C.M., Bae N., Almeida M., Denhardt D.T., Alpers C.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    33.3%; Score 111; DB 2; Length 165; 91.7%; Pred. No. 0.002; o; Mismatches 0; Indels
                                                                                                                                                          Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
Bradyrhizobiaceae; Rhodopseudomonas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92F507AE948A0F67 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cDNA reveals an Arg-Gly-Asp cell-binding sequence.",
Proc. Natl. Acad. Sci. U.S.A. 83:8819-8823(1986).
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Collagen triple helix repeat precursor.
OrderedLocusNames=RPA2801;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    317 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            104 AGAAGAPGPAGPAGPAGPAGP 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 AGAAG--GPAGPAGPAGPAGP 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J. Biol. Chem. 267:23847-23851(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=93054745; PubMed=1429723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INE=87067405; PubMed=3024151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=Spp1; Synonyms=2b7, Spp-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165 AA; 15559 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Rel. 06, Created)
(Rel. 25, Last seq
                                                                                                                                  Rhodopseudomonas palustris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rattus norvegicus (Rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10116;
                                                                                                                                                                                                                         NCBI_TaxID=1076;
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Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FirrV-1-B37 precursor.
Feldmannia irregularis virus a.
Viruses; dsDNA viruses, no RNA stage; Phycodnaviridae; Phaeovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
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Delaroque N., Boland W., Muller D.G., Knippers R.;
"Comparisons of two large phaeoviral genomes and evolutionary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              y Match 33.3%; Score 111; DB 2; Length 317; Local Similarity 64.5%; Pred. No. 0.0038; hes 20; Conservative 4; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                              Yamamoto S.;
Submitted (FEB.1997) to the EMBL/GenBank/DDBJ databases.
Submitted (FEB.1997) to the EMBL/GenBank/DDBJ databases.
EMBL; AB001382; BAA19247.1; -.
GO; GO:0001503; P:ceal adhesion; IEA.
GO; GO:0001503; P:cssification; IEA.
InterPro; IPR002038; Osteopontin.
FEAM; PF00665; Osteopontin; 1.
PRINTS; PR00216; OSTEOPONTIN.
SWART; SM00017; OSTEO; 1.
PROSTITE; PS00084; OSTEOPONTIN; 1.
SEQUENCE 317 AA; 34963 MW; 779ASF00F8862310 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 108; DB 2; Length 200;
Pred. No. 0.0047;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
STRAIN=FirrV-1;
STRAIN=FirrV-1;
Delarcque N., Knippers R., Mueller D.G., Boland W.;
Submitred (JAN-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AY225134; AAR26912.1;
GO; GO:0005737; C:cytoplasm; IEA.
GO; GO:0006817; P:phosphate transport; IEA.
                                                                                                                                  STRAIN=Wister;
YAMAWOOS S., UEMURA T.;
Submitted (MAR-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 26 Potential.
200 AA; 19104 MW; 1A35AB97C69244A2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (TrEMBLrel. 27, Created)
(TrEMBLrel. 27, Last sequence update)
(TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          129 DVLTPIAPTVDVPDGRGDSLAYGLRSKSRSF 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7 EVFTPVVPTVDTYDGRGDSVVYGRRSKSKKF 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40 PAGAAG--GPAGPAGPAGPAGPA 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mol. Evol. 57:613-622(2003).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            32.4%;
80.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF01391; Collagen; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 80.8 Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=231992;
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                                NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                           STRAIN=Wister;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        implications."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q6XLZ9;
05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JUL-2004
05-JUL-2004
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SEQUENCE
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Q6XLZ9
      ACCOOR SET TO THE SET 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G0:0005578; C:extracellular matrix; ISS.
G0:0005125; F:cytokine activity; ISS.
G0:0008018; F:growth factor activity; ISS.
G0:0000816; F:integrin binding; ISS.
G0:000516; F:integrin binding; ISS.
G0:000718; F:integrin binding; ISS.
G0:000716; F:cell-cell signaling; ISS.
G0:000716; P:cell-matrix adhesion; ISS.
G0:000160; P:cell-matrix adhesion; ISS.
G0:0001605; P:induction of positive chemotaxis; ISS.
G0:0005093; P:induction of positive chemotaxis; ISS.
G0:0016093; P:induction of mositive chemotaxis; ISS.
G0:0016010; P:positive regulation of T-cell proliferation; ISS.
G0:0042102; P:regulation of myeloid blood cell differenti. .; ISS.
G0:0042088; P:T-helper I type immune response; ISS.
                                                                                                                                               -!- FUNCTION: Acts as a cytokine involved in enhancing production of interferon-gamma and interleukin-12 and reducing production of interleukin-10 and is essential in the pathway that leads to type interleukin-10 and is essential in the pathway that leads to type I immunity (By similarity).
-!- SUBCHIJUARI LOCATION: Secreted.
-!- FTM: Extensively phosphorylated on serine residues.
-!- FTM: N- and O-glycosylated.
-!- FTM: N- and O-glycosylated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                      J. Clin. Invest. 92:1686-1696(1993).
-1- FUNCTION: Binds tightly to hydroxyapatite. Appears to form an integral part of the mineralized matrix. Probably important to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus norvegicus (Rat).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Volcantonion.
Ostcopontion.
Poly-Asp.
Cell attachment site.
N-linked (GlcNAc. . ) (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
and is a novel component of human atherosclerotic plagues.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; Length 317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE, PS00884, OSTEOPONTIN; 1.
Biomineralization, Cell adhesion, Cytokine, Glycoprotein,
Phosphorylation, Sialic acid, Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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Last annotation update)
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Local Similarity 64.5%; Pred. No. 0.0038;
Nes 20; Conservative 4; Mismatches '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          317 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7 EVFTPWVPTWDTYDGRGDSWYGRRSKSKKF 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Potential
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR002038; Osteopontin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam; PF00865; Osteopontin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             317 AA; 34963 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; M99252; AAA41765.1; -. EMBL; M14656; AAA41762.1; -.
                                                                                                                           cell-matrix interaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRINTS; PR00216; OSTEOPONTIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAY-1997 (TrEMBLrel. 03, 01-MAY-1997 (TrEMBLrel. 03, 01-MAR-2004 (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PIR; A25917; A25917.
RGD; 3752; Spp1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Osteopontin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
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